FINANCIAL TIMES

EUROPE'S BUSINESS NEWSPAPER

No. 29,490 — Monday December 3 1984 — D 8523 B

UK unemployment: an alternative to the dole queue, Page 14

NEWS SUMMARY

GENERAL

Move on British miners' assets

Renewed efforts to seize financial control of Britain's National Union of Mineworkers will be made in Luxembourg today by the official receiver appointed by the High Court in London to take over the financial running of the union.

Mr Herbert Brewer, the receiver, flew to Luxembourg as the NUM executive met in London following the court's rejection of the union's appeal against his appointment.

The signs were that the executive of the NUM was deeply divided over whether to continue its defiance of court orders made as a result of action brought by working miners. Page 16; Background, Page 8

Sri Lanka 'invasion'

The Indian Government reacted angrily to allegations by the Sri Lanka Minister of National Security that Tamil militants had mounted an armed invasion on northern parts of the island from bases in south India. There were reports of fierce fighting between Tamil militants and Sri Lanka soldiers. Page 3

Salvador breakdown

El Salvador's peace process appears to have broken down before negotiations have even started, following President José Napoleon Duarte's categorical rejection of left-wing rebel proposals to end the five-year-old civil war. Page 2

Zia referendum

Pakistani military ruler Mohammad Zia-ul-Haq has effectively reappointed himself president by calling a snap referendum on his Islamic policies that will give him a five-year mandate when it is passed. Page 3

Singapore elections

Singapore will hold general elections on December 22. New candidates for the ruling People's Action Party include Brigadier-general Lee Hsien Loong, son of Premier Lee Kuan Yew. Page 3

Border shooting

Hours after West Germany praised East Germany for dismantling the last of 55,000 automatic shrapnel guns on the border, East German border guards fired at least 20 shots at a would-be escaper, apparently killing him.

Self-rule plans

France sent Edgard Pisani, a European Community High Commissioner, to New Caledonia as its special representative to draw up plans for self-rule for the troubled South Pacific territory. Page 2

Anti-Nato protest

Some 35,000 people formed a human chain in Madrid to press for Spain's withdrawal from Nato and the removal of U.S. military bases.

Hussein call

King Hussein of Jordan made a spirited call for joint Arab action on Middle East peace and said that the Palestine Liberation Organisation must be included in any peace talks.

Poles jump ship

Another 51 Poles jumped ship, from the Szczecin ferry to West German port Travemünde, making a total of nearly 500 refugees in two weeks.

Swiss media vote

Swiss voters approved two government proposed amendments to the federal constitution designed to define the role of the electronic media and to improve help for victims of violent crime.

Dalai Lama's visit

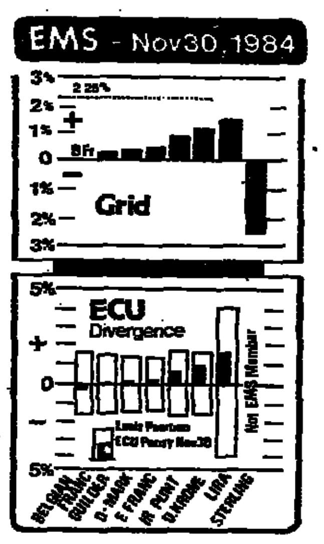
Tibet's exiled spiritual leader the Dalai Lama has agreed to make a return visit and to talk with senior Chinese leaders.

BUSINESS

Case and IH deal may take 3 years

CONSOLIDATION of the European farm equipment operations of J. I. Case and International Harvester could take up to three years to complete. Page 16

RENEWED dollar strength depressed the D-Mark within the European Monetary System last week and enabled weaker currencies to show a small improvement. The D-Mark fell to a nine-month low against the French franc, party reflecting the D-Mark's weakness against the dollar and also showing some short-term speculation in order to exploit interest rate differentials. Other member currencies traded quietly and with the West German Bundesbank leaving its key lending rates unchanged, there seemed little chance of other EMS members cutting interest rates.



The chart shows the two constraints on European Monetary System exchange rates. The upper grid, based on the weakest currency in the system, defines the cross rates from which no currency (except the lira) may move more than 2¼ per cent. The lower chart gives each currency's divergence from its "central rate" against the European Currency Unit (ECU), itself a basket of European currencies.

EUROYEN BONDS: Market opens officially to non-Japanese corporate borrowers and government agencies today, after frenzied activity last week in the bond market and certificate of deposit market, alike liberalised from this week. Page 17

WORLD OIL stocks are likely to be run down by 1.4m barrels a day outside the communist bloc, the International Energy Agency said. Page 4

TOKYO Blue chips were hit by Wall Street's decline, but other advances pushed the Nikkei Dow index up by 8.80 to a record 11,437.70 in busy trading on Saturday. Prices, Page 23

BRAZILIAN FUTURES Market opened in Rio de Janeiro and will trade initially only in gold futures.

EUROPROGRAMME, L1,000bn ($525.7m) property fund controlled by Italian financier Orazio Bagnasco, may have to be liquidated next spring. Page 16

NEUE HEIMAT, troubled West German property group, is to be restructured, mainly to help its NHS subsidiary, which could lose DM 100m ($32.5m) this year. Page 19

GENERAL MOTORS of the U.S. is entering a $100m joint production venture with Mexico's state-owned bus and lorry maker Dina. Page 4

CONTINENTAL ILLINOIS: Federal Deposit Insurance Corporation, which rescued the Chicago bank this year, is dismissing more than half of its board. Page 19

JOHNSON GROUP Cleaners is going to make £6.1m ($7.5m) profit before tax in 1984 (£6.3m) and expects a 37 per cent rise in the next half. Page 20

CHARLES FULTON and Cantor Fitzgerald Securities of New York are to act as joint brokers for U.S. Government securities in London from February. Page 9

Wine lake problem key to deal on EEC expansion

BY QUENTIN PEEL IN BRUSSELS

THE TEN heads of state and government of the European Community meet in Dublin today with just an outside chance of reaching agreement on their long-stalled negotiations on terms for the future membership of Spain and Portugal.

The key to the summit's success is the question of how to control the huge overproduction of wine in the Community, before Spain, in particular, brings a further flood to add to the existing wine lake.

Dr Garrett FitzGerald, the Irish Prime Minister and president of the European Council, has spent the past few days in hectic consultations with his fellow government leaders to unblock the talks and save his summit from ignominious failure.

His efforts have included a dash to Paris and Rome for talks with President François Mitterrand and Sig Bettino Craxi, the Italian Prime Minister, to seek the basis for a compromise agreement that might revive the enlargement talks and enable them to be resolved by the end of the year.

Irish officials said he had received no new indications as to whether a new wine policy would emerge from today's meeting, but Brussels officials believe there is an outside possibility of agreement, with Italy accepting some means of curbing wine production by forcing excess output to be distilled at very low prices.

The key is to find acceptable means of triggering that compulsory distillation.

If the wine issue can be resolved, at least in outline, then fisheries and trade in fruit and vegetables, the other outstanding points in the enlargement discussions, are likely to fall swiftly into place.

It is the failure among the Ten to agree on their own position on the issues that has delayed the negotiations with Spain and Portugal. That also threatens to push the whole enlargement process back, in which case the projected date of entry, January 1 1986, would be impossible to meet.

Even if they agree among themselves, the terms may be so strict as to be quite unpalatable to the applicants.

The enlargement deadlock has been forced on to the summit agenda because of the failure of the 10 foreign ministers last week to make any progress over three days.

Enlargement seems certain to dominate the agenda at the expense of the broad strategic questions the heads of government had hoped to debate – the future development of the Community and its institutions, and how to improve co-ordination of economic policies, particularly to tackle unemployment.

In addition, they have still to resolve the issue of budget discipline, involving the long-term control of Community spending, which is caught up in a dispute over how to involve the European Parliament.

If that is not finalised, Britain and West Germany have threatened not to contribute extra cash this year, to tide the Community over a Ecu 1bn ($714m) spending gap.

The impasse, Page 15

Big investors rebuffed as BT share offer 4 times oversubscribed

BY ALISON HOGAN IN LONDON

ONLY the smallest investors are to have their applications for shares in newly privatised British Telecom (BT) met in full. Wealthy individuals who applied for large tranches in the £3.9bn ($4.8bn) sale are to receive no shares at all.

The UK component of the offer was four times oversubscribed, producing applications worth £16.75bn for 12.75bn shares. A total of only 3bn shares were for sale, of which 415m have gone to investors in the U.S., Canada and Japan.

The partly paid shares were priced at 130p, with 50p payable upon application.

BT will start life in the private sector with about 2.3m shareholders. The UK Government, in accordance with its policy to broaden share ownership, has met in full the applications of over 1m people who applied for between 200 and 400 shares, the minimum amounts. A further 1m investors who applied for up to 100,000 shares will receive only 800 shares. The 7,500 applications for over 100,000 shares have been turned down completely.

The larger investors are thought mainly to be wealthy individuals, although there may also have been some applications from institutions, hoping to top up the 1.428bn shares, or 47.4 per cent of the offer, which they had already secured through an earlier placing by the Government.

Investors who applied for 800 shares will receive 500; applicants for 1,200 will receive 600 shares and those who applied for between 1,600 and 100,000 shares will receive 800 shares each.

Individual share allocations are being dealt with on a similar basis worldwide.

About two out of every three successful investors opted for the incentive of eventual bonus shares, rather than £18 vouchers towards telephone bills. That might indicate that they intend to remain long-term holders of the shares.

Stockbrokers and jobbers expect early trading in the shares (which starts at 3pm today) to be volatile, with many disappointed investors seeking to buy more shares, but few people wanting to sell. The partly-paid shares of 50p could reach a premium as high as 35p.

The jobbers, who make a price in the shares, say that BT will be one of the most difficult shares to price, since the level of selling is so hard to predict.

UK investors will not receive their letters of acceptance until next week – they are being posted on Monday, December 10 – and may hold back selling until then. The jobbers are looking overseas for their main supply of stock.

The U.S. has proved a source in earlier large issues, including British Petroleum and Reuters, but Mr Charles Hue Williams of Wedd, Durlacher, the jobbers, said that U.S. investors "have found this issue very attractive and have been very much scaled down, so they might try and buy some more."

The Government has cashed all successful cheques for part payment, expected to amount to about £1.5bn, which might earn the Government some £3m in interest for a week, before investors receive their refunds.

Thousands of suspected multiple applications were rooted out and the Government intends to cash some of the cheques "of a handful of real villains," according to its advisers, in order to discourage them from similar actions in future.

British Telecom employees and pensioners took up 137m shares, a little under half the shares reserved for them, ending up with 4.6 per cent of the shares offered to the public.

The UK public will have around 1bn shares, 34.3 per cent of the offer, some 3,000 institutions have received 1.428bn shares equivalent to 47.4 per cent, and overseas investors were allocated 415m shares, or 13.7 per cent of the offer.

Lex, Page 16

Argentina close to agreement on debt package

BY PETER MONTAGNON, EUROMARKETS CORRESPONDENT, IN LONDON

ARGENTINA was close to an agreement with its leading commercial bank creditors last night on a $20bn package designed to help restore orderly servicing of its $45bn foreign debt.

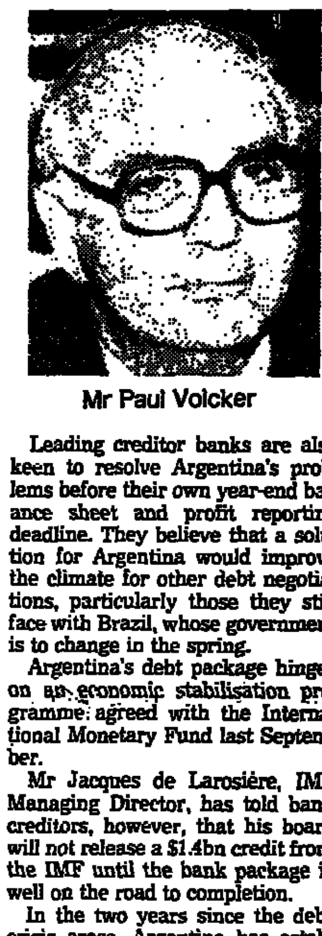
However, hopes that the package, which is to include a new $4.2bn loan as well as the rescheduling of $16bn in public and private-sector debt, could have been launched before the deadline set by the banks for the end of November were dashed as talks continued in New York throughout the weekend.

One banker close to the negotiations said last night: "The outstanding points are just details, however. I don't think there are any major obstacles left."

The agreement, which will reschedule debt due as far back as 1982, was expected to be one of the most complicated rescheduling deals ever and needed meticulous preparation, bankers said.

Senior bankers, who had previously resisted offering Argentina a credit as large as $4.2bn, have also been worried that the package might meet a hostile reception from a banking community that has grown increasingly resentful of Argentine interest arrears now stretching back to last May. Most of Argentina's foreign debt was recently declared sub-standard by U.S. government agencies responsible for supervising the banking system.

Top U.S. officials including Mr Donald Regan, Treasury Secretary, and Mr Paul Volcker, Chairman of the Federal Reserve Board, have now put their weight behind a speedy solution to Argentina's debt, however. This is expected to be symbolised in a $500m U.S. Treasury bridging loan accompanying the debt package.



Mr Paul Volcker

Leading creditor banks are also keen to resolve Argentina's problems before their own year-end balance sheet and profit reporting deadline. They believe that a solution for Argentina would improve the climate for other debt negotiations, particularly those they still face with Brazil, whose government is to change in the spring.

Argentina's debt package hinges on an economic stabilisation programme agreed with the International Monetary Fund last September.

Mr Jacques de Larosière, IMF Managing Director, has told bank creditors, however, that his board will not release a $1.4bn credit from the IMF until the bank package is well on the road to completion.

In the two years since the debt crisis arose, Argentina has established a tradition of brinkmanship in negotiating with its creditors. Talks have also frequently been complicated by bilateral friction between Argentina and the British banking community after the Falklands war.

Capital markets, Section II

Hawke blames setback on voting 'confusion'

By Michael Thompson-Noel in Sydney

MR BOB HAWKE, the Australian Prime Minister, claimed yesterday that his Labor Government had been denied an emphatic win in Saturday's general election because of unprecedented confusion over voting procedures.

With more than 500,000 votes disqualified – apparently most of them Labor's – Mr Hawke's majority will be about 16, instead of the expected 40 to 50.

The result has damaged Mr Hawke's authority and political credibility, and provided a strong boost to the Liberal-National opposition parties.

The mix-up occurred as a result of a "simplified" ballot system for elections to the Senate (upper house). Thousands of Australians mistakenly assumed that the system applied to ballot papers for the House of Representatives.

As a result, their votes were disqualified. Labor claims that about 80 per cent of the disqualified votes were Labor votes, in the confusion appearing at its worst in ethnic and urban Labor strongholds.

A contributing factor may have been misleading instruction cards issued to voters by Labor Party workers.

With counting not yet complete, Labor has 79 seats to the coalition's 63, with six undecided. The final split is expected to be 82 to 66, for a Labor majority of 16.

The number of votes disqualified on Saturday was about 7 per cent, which is more than three times higher than usual. The Australian Electoral Office is mounting an immediate investigation, and may recommend sweeping changes to the voting system, which is too complicated.

Voting is compulsory in Australia.

In addition to confusion at the polls, the lower house election was complicated by changed electoral boundaries and a larger number of seats. Final blame for the mix-up may never be apportioned.

Mr Hawke said yesterday: "We're all a bit wiser after the event. If the intention of the people had been reflected in the result, the headlines today would have been 'Swing to the Government'."

Mr Hawke said Labor had firmly anticipated a swing in its favour of 1 to 1.5 percentage points. In the event, the opposite occurred.

Mr Andrew Peacock, leader of the Liberals, claimed there was a large element of protest by Labor

Continued on Page 16

Background, Page 3

European companies to meet on Japan, U.S. biotech threat

BY DAVID FISHLOCK, SCIENCE EDITOR, IN LONDON

CHAIRMEN from Europe's major chemical, pharmaceutical and food companies are to meet this month to discuss the growing threat to European biotechnology from Japan and the U.S.

The meeting, in Brussels, on December 12, has been called by Viscount Etienne Davignon, the EEC Industry Minister. He used the same tactic to attract top-level industrial interest in the Community's £850m Esprit programme of pre-competitive research support for European electronics.

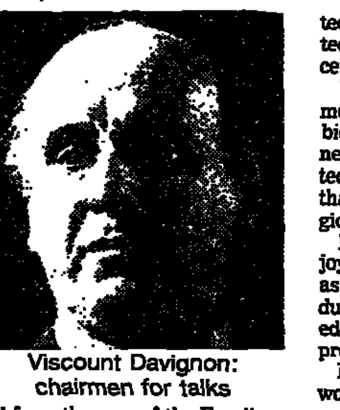
About 16 company chairmen are being invited personally by Viscount Davignon, including those of Bayer and Hoechst in West Germany, Elf-Aquitaine and Rhône-Poulenc in France, Akzo-Pharma and Gist-Brocades in the Netherlands, Montedison in Italy, Novo in Denmark, and Glaxo and Unilever in the UK.

Britain has been asked to chair the meeting.

Mr John Harvey-Jones, chairman of ICI, the UK group, has agreed to chair the biotechnology meeting, which takes place just one week before a proposal for EEC support for biotechnology is put to the Council of Ministers, on December 19.

ICI, with a large production and development centre for biotechnology in the UK, is probably Europe's strongest biotechnology company.

To initiate Esprit (the European Strategic Programme of Research in Information Technology) Viscount Davignon first brought together the chairmen of Europe's 12 top electronics companies, which



Viscount Davignon: chairmen for talks

still form the core of the Esprit programme.

They agreed on a large programme of collaborative research between companies, particularly in advanced manufacturing technologies.

EEC officials believe that in the field of biotechnology Europe is acting from a position of greater strength than in electronics. It has some of the most powerful research-based companies in the world in this field.

EEC scientists also believe that information technology has immense potential for advancing biotechnology, which may benefit from close links with the Esprit programme.

Nevertheless, the community is worried by the scale of commitment of the Japanese to a national effort to exploit the new techniques of biotechnology, such as genetic engineering.

The Japanese have declared biotechnology to be "the last major technological revolution of this century."

In 1981, the Japanese Government launched a 10-year plan for biotechnology, focusing on the next generation of industrial biotechnologies, and committing more than $100m to the support of strategic research, mostly by companies.

Participating companies also enjoy generous tax advantages, such as a 100 per cent depreciation reduction, on all fixed assets associated with the national research programme.

EEC officials say they are also worried about the scale of U.S. investment in biotechnology. One estimate suggests that U.S. industry will have invested more than $2bn in biotechnology research this year.

More than 200 new biotechnology firms with close links with U.S. universities and national laboratories have been launched in the past five years.

Two new U.S. biotechnology trade associations, representing both the new biotechnology firms and established chemical and drug companies have been recruiting European companies in an effort to strengthen the U.S. position in relation to Japan.

Some European companies – notably Hoechst – have made a substantial long-term biotechnology research investment in the U.S.

The first meeting on biotechnology is expected to focus less on joint research between participating companies than on the major commercial handicaps to European industry.

CONTENTS

Regan hits out at Wall St over tax plan

By Reginald Dale, U.S. Editor, in Washington

MR DONALD REGAN, the U.S. Treasury Secretary, yesterday *said he was confident* that he could win President Ronald Reagan's support for his controversial plan to simplify the American tax system, unveiled last week.

He sharply criticised his former colleagues on Wall Street as "silly" for complaining about the plan *before* they knew its full details.

Mr Regan said that the second, more detailed volume of the plan, which would *shift* part of the tax burden from individuals to large sectors of big business, would be published today. Wall Street was "hip-shooting as usual" without having read part two, he said.

In an interview with ABC Television, Mr Regan also said defence spending *would* have to be "part of the package" of spending cuts on which Mr Reagan is to resume work today—despite vehement opposition from Mr Caspar Weinberger, the Defence Secretary. He stressed, however, that the President had made no final decision *on* defence cuts and would not consider them until he had looked at cutbacks or freezes in all the other programmes under review.

Mr Regan said that reducing the budget deficit through spending cuts would have to come first but he hoped the *spending cuts and tax simplification* could proceed at the same *time on* "two tracks."

Mr Dan Rostenkowski, Democratic *chairman of* the House ways and means committee which is responsible for initiating tax legislation, said Mr Regan's tax plan was "a giant step in the right direction."

Duarte rejects rebel peace plan

BY DAVID GARDNER IN MEXICO CITY

EL SALVADOR's peace process, begun with such fanfare and hope last month, appears to have broken down before negotiations have even started, following President Jose Napoleon *Duarte's categorical* rejection of left-wing rebel proposals to end the five-year-old civil war.

Minutes after the second round of talks between Government representatives and insurgent *leaders finished late on* Friday, Sr Duarte went on television to turn down the rebel proposals as "unconstitutional."

The insurgent plan called for a phased move towards a power-sharing Government and *national consensus, with some* form of integration of guerrilla forces with a regular army purged of the extreme Right, followed by new elections open to all.

This plan largely by-passes the *existing constitution*, which the guerrillas want to see reformed by referendum. The constitution was drafted by the extreme Right-dominated constituent assembly elected in the controversial 1982 election.

At a Press conference on Saturday, Sr Duarte described the rebels' posture an intransi*gent and insolent, saying* they were only interested in dialogue for tactical reasons. At the same time, he made clear his own peace proposal, presented to rebel leaders at *last* month's meeting in the guerrilla stronghold of La Palma, was not negotiable.

Sr Duarte's peace offer calls on the rebels to lay down their arms and agree to take part in the electoral process, after which they would be amnesied. The Government, *Sr Duarte* says, would guarantee the Left physical security and the right to organise.

The rebels took no part in either the 1982 election or the poll which this year brought Sr Duarte's Christian Democrats to power, claiming that democratic elections are not possible in a country *dominated* by a reactionary, land-owning *oligarchy*, backed by an extreme right-wing army equipped and financed by the U.S.

President Duarte repeated at the weekend remarks he made when he launched his peace initiative, that he would "not stray *one millimetre* from the constitution. He said: "If I were to step outside the constitution I would cease to be President."

He denied that the army was setting the limits to his peace effort, saying that he was bound only by the limits of the constitution.

The 12 hours of talks on Friday saw both sides barricade themselves into irreconcilable positions. Instead of the hoped-for Christmas ceasefire, the guerrillas have agreed to allow the free passage of all vehicles for 13 days from December 22.

Sr Duarte claims the rebels *refused to consider the* government offer of a ceasefire. The rebels, who say their ceasefire proposal in La Palma was rejected, argue that the government was this time seeking a unilateral ceasefire from the guerrillas.

Although the joint communique from Friday's talks commits both sides to continuing the dialogue, no date for a new meeting was set.

The far right was yesterday jubilant at the outcome *of* the talks. Major Roberto D'Aubuisson, the far Right leader widely connected to the death squads, said Friday's broadcast by Sr Duarte and his delegation could easily have ben made by his own Arena Party, provided "you blackened out the picture."

Pisani sent to New Caledonia

BY PAUL BETTS IN PARIS

THE FRENCH Government dispatched M Edgar Pisani, the European Community commissioner and former Gaullist minister, to New Caledonia *yesterday* to try to put an end to the growing violence in the French Pacific territory.

M Pisani will also attempt to negotiate a peaceful and lasting *settlement* between white loyalists and black Melanesian separatists.

But as the Socialist Administration sought to defuse the crisis, it faced a fresh wave of separatist violence on the *Mediterranean island of Corsica*.

A French CRS riot police officer was killed and two others seriously wounded by separatists at Bastia early yesterday. Violent clashes also erupted between separatists and police on Saturday night at Ajaccio, the Corsican capital.

M Pisani, a minister of agriculture under General de Gaulle who subsequently joined the Socialist Party, was appointed High Commissioner of New Caledonia with *full emergency* powers after a special Cabinet *meeting on* Saturday evening.

M Pisani has been given two months to find a solution to the increasingly bitter conflict which is having serious political repercussions at home for President Mitterrand.

M Laurent Fabius, the Socialist Prime Minister, said at the weekend that the French Government intended to restore and maintain order on the Pacific territory as well as to encourage dialogue between all parties.

The French Government is keen to advance the proces of self-determination on the Pacific islands and hold a referendum in New Caledonia on the issue of independence before the 1986 French legislative elections.

M Pisani's essential task will be to prepare the ground rules for such a referendum which satisfies both loyalists and separatists.

Although the situation on the territory remains tense, both loyalist and *separatist camps* welcomed the appointment of *M Pisani*.

His immediate task, however, will be to try to restore order. The death of a white resident and the wounding of several loyalists and separatists in clashes have increased tensinos. The Government has *dispatched* 1,500 gendarmes to the *territory*.

Hussein in plea for Arab unity

By Tony Walker in Cairo

KING HUSSEIN of Jordan, making a spirited call for joint Arab action on Middle East peace, insisted yesterday that the Palestine Liberation Organisation must be included in any *peace talks*.

The king, in an address to Egypt's Parliament in which he criticised the Camp David accords of 1978 between Egypt and Israel, said Jordan could not replace the PLO as a representative of the Palestinian people.

King Hussein said Jordan had rejected the Camp David accords "*from* the *start*" because they had not dealt with the questions of the Israeli occupied West Bank and Gaza Strip and had excluded the PLO as representatives of the Palestinians.

The king appeared to be specifically answering suggestions *that Jordan act as the* representative of the PLO in possible *talks with the Israelis*. Israel has steadfastly maintained that it will not deal with the PLO which it describes as a "terrorist organisation."

King Hussein is on a brief visit to Egypt for talks with President Mubarak, the Egyptian leader. His visit follows Jordan's announcement on September 25 that it was restoring relations with Egypt after a five-year break.

Egypt and Jordan are making no secret of their interest in encouraging a renewed Middle East peace drive with the direct participation of the PLO under the leadership of Mr Yassir Arafat.

In Amman *last* week, the Palestine National Council, the Palestinians' *Parliament-in-exile*, authorised Mr Arafat to explore with Jordan a possible joint initiative towards peace in the Middle East.

King Hussein wants negotiations on a possible Palestinian "homeland" on the West Bank to take place under the auspices of the *United Nations*.

Irish Central Bank in bid to minimise effect of strike

BY BRENDAN KEENAN IN DUBLIN

MANAGERS in the Irish Central Bank, where over 300 staff are due to go on strike *today, will concentrate on* maintaining the value of the Irish pound in *foreign* exchange markets while the strike lasts.

The main effect of the strike on the public is likely to be a shortage of notes in circulation for Christmas. Normally, the amount of currency is in*creased by up to 10 per cent* at this time of year and shoppers are being urged to use cheques and credit cards where possible.

The strike at the bank begins as Irish interest rates will go up by 2 per cent from the close of business today. The rise, against *international trends*, has been forced by heavy Government borrowing on the domestic market, as the Exchequer tries to keep foreign borrowing to this year's target of I£640m (£542m).

There are fears that the strike could affect the gilts market where the Government is expected to remain active to the end of the year. It is due to raise over I£1bn in the *market this year, much of it in* the last quarter. The bank acts as registrar of gilts.

One effect will be that owners of gilts will not receive dividends as they fall due but officials believe an effective market can be maintained.

The rise in interest rates brings the ordinary overdraft rate to 17.25 per cent. Rates for deposits under I£25,000 are going up by only 1 per cent which should minimise the effect of mortgage rates.

The Department of Finance is making arangements to ensure that foreign debt repay*ments are made as they fall* due, a function normally carried out by the bank.

The striking workers, who are members of ASTMS, are seeking a 15 per cent pay rise but the bank has offered an increase within Government guidelines—no pay rise this year and 3 per cent next year.

Moderates favoured for Grenada poll

By Canute James in St George's

THE New National Party (NNP), a moderae coalition supported by the U.S. and several eastern Caribbean governments is favoured to win today's general election in *Grenada*.

Opinion polls indicate the NNP could win nine of the 15 seats, with others going to the Grenada United Labour Party or Sir Eric Gairy, the controversial former Prime Minister.

The Maurice Bishop Patriotic Movement is not expected to fare well. *It is the* remnant of the Socialist Party of Mr *Maurice Bishop*, murdered in last year's coup which sparked off the invasion by forces of the U.S. and contingents from Caribbean governments. The Christian Democratic Labour Party has already counted itself out, saying it wants to form the opposition.

Security has been strengthened for today's poll, for which 47,000 voters are eligible. Some 150 constables from neighbouring islands, mostly from Barbados, have joined the 250 U.S. troops and 450 Caribbean troops and police already on the island.

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OVERSEAS NEWS

Sri Lanka extends curfew to curb violence

By Mervyn de Silva in Colombo and K. K. Sharma in New Delhi

THE SRI LANKA Government yesterday extended the curfew in the northern part of the island following the escalation of fighting between its security forces and Tamil separatist guerrillas.

Mr Wickrema Weerasooriya, a Government official, however, corrected earlier reports that 57 people had been killed Saturday morning in attacks by guerrillas—allegedly based in Madras, India—on two fishing villages, Nyaru and Kokilai. He said 11 had been killed and 13 injured.

The attack on the fishing villages followed Friday's massacre of 65 rehabilitated prisoners working as settler farmers on two agricultural projects. The Sinhalese army claimed it had killed over 80 rebels and arrested 30 suspects in a counter-attack.

On Saturday night, the Government reported yesterday, Tamil rebels made another attempt to land near Mannar on the north-eastern coast. The navy destroyed six out of eight boats, the Government claimed.

A curfew lasting from 5 pm to 6 pm was imposed on five north-western towns which have only a small Tamil population. The fishermen who died in the raids of Nyaru and Kokilai are thought to have had families in these towns and the Government may have feared reprisals.

Security measures announced last week included declaration of the entire northern coastline as a "prohibited area" to all boats. In addition, the Jaffna peninsula was declared a "security zone." Movement to and from the zone has been restricted to those with special permits.

The Indian Government reacted angrily to allegations by Mr Lalith Athulathmudali, the Sri Lanka Minister of National Security, that Tamil militants had mounted an armed "invasion" of the northern parts of the island from bases in South India.

The Indian External Affairs Ministry said the allegations were "totally without basis and we are shocked that a war psychosis is being built up. There is no question of invasion from any part of India."

Michael Thompson-Noel looks at Labor's prospects after its setback at the polls

Hawke the victor, but with clipped wings

His wings clipped by a mix-up over voting procedures, Mr Bob Hawke, the Australian Prime Minister, seemed chastened and grave yesterday following a general election win on Saturday in which his Labor Government reaped a far smaller majority than generally anticipated.

The damage to Mr Hawke's prestige was reflected in a comment at 5.51 pm on Saturday night—less than three hours after the polling booths closed—by Mr Bill Hayden, the man Mr Hawke deposed as Labor leader in February 1983, who now serves as Foreign Minister.

Mr Hayden has an impish sense of timing. Speaking of Mr Hawke, he said: "The drover's dog is going to win again, but he looks a bit clapped out this time. We've been taught a lesson, something's gone wrong. We'de better find the reason for it."

Mr Hayden was commenting on the confusion caused by changes in Australia's already-complicated ballot system, which led to a record number of disqualified votes—many of them Labor's—that helped cost Mr Hawke the near-landslide win Labor had expected.

Instead of a majority of about 40 seats in the enlarged, 148-seat House of Representatives, Mr Hawke's majority will be around 16.

At once, Labor's opponents were celebrating Mr Hawke's damaged credibility. Mr Andrew Peacock, whose authority as Liberal Party leader is enhanced by the campaign, said he would win the next election.

His coalition partner, Mr Ian Sinclair, leader of the rural-based National Party, which gained from the election, was rather more brutal. "Anybody who kicks Bob Hawke in the pants should be happy," said Mr Sinclair.

In addition to the mix-up over voting papers, Mr Hawke is reckoned to have suffered for calling the election 15 months early, and for opting for a drawn-out, seven-week campaign.

His televised debate with Mr Peacock last Monday also cost him ground. Finally, it was claimed yesterday that arrogance and over-confidence on the campaign trail—plus a minor backlash over his pro-uranium policies—had hurt Mr Hawke.

Yesterday, Mr Hawke was greatly subdued, but insisted that his Government would "deliver the goods" over its new term. He says he will serve a full three years.

"Let's get it straight," said the Prime Minister. "We've won, and won with a comfortable working majority."

Whatever the political embarrassment caused by the weekend's events, Mr Hawke's appeal as the non-partisan architect of "national reconciliation" may be largely undamaged.

Labour will continue on its right-wing tack, and with its pay and prices accord with the trades unions, which forms the bedrock of its success with the economy to date.

Under Labor, which has ruled for just 20 months, inflation has been halved, employment boosted, business confidence bolstered, and industrial harmony restored.

Mr Hawke's challenge is to demonstrate that Labor's accord with the unions can be made to stick.

During the campaign, Labor pledged that over the next three years, Federal tax revenue and the Federal budget deficit would not rise as a proportion of Gross Domestic Product, and that Government expenditure growth would not exceed the growth rate of the economy, which is expected to be a little over 4 per cent in 1984-85.

Labor has also vowed to chop back excess business legislation and regulation, to strengthen manufacturing industry, to overhaul the tax system, and to raise education and health standards.

In regional terms, Mr Hawke will seek to build on good relations with Japan, the U.S., and China, and to encourage much stronger ties with the Asean bloc, which despite its proximity takes less than 3 per cent of its imports from Australia.

At the start of his campaign, Mr Hawke claimed that Australians had acquired a new self-confidence and self-respect. Mr Hawke's own self-confidence will have been damaged by the election's outcome, and Labor's honeymoon is undoubtedly over. But the initiative remains with Mr Hawke. His ambition of winning the next election and ruling until 1990 may well be realised.

Zia offers himself for re-election in referendum

BY MOHAMMAD AFTAB IN ISLAMABAD

PAKISTAN'S President Gen Mohammed Zia ul Haq, in a surprise announcement over the weekend, offered himself to be re-elected for a five-year term after more than seven years of his rule. There will be no other candidate.

The unprecedented election will come through a referendum the first to be held on any issue in Pakistan since it gained independence from the British in 1947.

Parliamentary elections are once again pushed into the background, which may mean further political simmering in a nation where all political parties and activities are banned under martial law.

The referendum will link the vote to his programme of Islamising the society, economy, law and judicial system.

Gen Zia said if the estimated 35m voters who will be eligible to participate in the referendum vote "yes" it would automatically mean that they had confidence in him, his policies, and his government.

The president has previously been elected through a referendum or a direct vote. The constitution provides for the election through a college comprising of the parliament and the senate, which itself should be elected and brought into existence, before it elects a president.

Gen Zia changed that procedure "once only" by amending the nation's unanimously adopted 1973 constitution over the weekend, as he has changed that document several times before.

He has publicly described a British-style Western democracy as "unIslamic," declaring that there was no room for political parties in Islam.

However, in his weekend television and radio speech, Gen Zia once again pledged to hold parliamentary elections by March 23, 1985. Opposition politicians, after his referendum proposals said: "We will keep our fingers crossed" over the national polls.

Gen Zia has already twice pledged and twice postponed elections since he came into power on July 5, 1977.

● Pakistan's main opposition alliance, the Movement for Restoration of Democracy, said yesterday it will boycott the referendum, Reuter reports from Karachi:

Singapore sets date for poll

By Chris Sherwell in Singapore

MR LEE KUAN YEW, Prime Minister of Singapore for the past 25 years, will seek a seventh term as prime minister in a general election called yesterday for Saturday December 22.

The election, which has long been expected, is seen by Singapore ministers as a watershed: senior ministers are standing down and 26 new candidates are standing for the ruling People's Action Party, including Brig Gen Lee Hsien Loong, Mr Lee's elder son.

The result is not on doubt. But 20 to 25 per cent of the electorate routinely vote against the PAP and attention will focus on this percentage, following a number of controversial government measures taken over the past year.

A total of 79 seats will be contested, four more than in the 1980 election. Another three "non-constituency" seats will be allotted to the three best losers in the event of a PAP clean sweep. The ruling party holds all but one of the present 75 parliamentary seats.

The sole opposition MP is Mr Ben Jeyaratnam of the Workers Party, who won a by-election in 1981.

WORLD TRADE NEWS

Rundown of 1.4m b/d forecast in last quarter's oil stocks

BY RICHARD JOHNS

THE rundown of commercial oil stocks in the last quarter of this year worldwide (outside the Communist bloc) is likely to be about 1.4m barrels a day, according to preliminary estimates by the International Energy Agency.

The IEA argued that, following little or no change in the level during October, the rate for November was 1.5m b/d. That would imply a further reduction of up to 2.7m b/d in December.

Its calculations contrast with the figure of 3 to 4m b/d given by Sheikh Yamani, Saudi Minister of Oil, last week—evidently referring to the rate since the the beginning of last month when the Organisation of Petroleum Exporting Countries cut its production ceiling to 16m

He accused the companies of "playing a dangerous game" and implicitly blamed their stock policies on the continued crumbling of oil prices

The industry acknowledges that it has been drawing down heavily on stocks. For instance, Mr David Welham, treasurer of Royal Dutch Petroleum (60 per cent owner of the Shell group), told analysts in Los Angeles last week that the level of the rundown had been substantiatial.

Shell declined to give its estimates of the extent of the reduction. But one major oil company put it at 1.2m b/d for the month of November and another at 1.6m b/d. Both regard Sheikh Yamani's figure as having been pitched too high as an explanation for Opec's failure so far to firm up the market.

Sheih Yamani's estimate could be seen as arithmetically plausible as a deduction from projections of demand and also from the assumption of Opec output running at just under 16.5m b/d in November. In the event consumption may have been far lower than generally expected with mild weather persisting and a continuing change in the old pattern of seasonal demand.

It is understood, meanwhile, that the Soviet Union last week imposed a force majeure in supplies to Nesté Oy, the state-owned Finnish company. Other significant buyers of Soviet crude have not been affected by lower Soviet availability, apparently because of higher domestic consumption, but the volumes being sold on the spot market have been reduced, according to one regular buyer.

FRANCE IS expected to lend Iraq about FFr 900m (£79m) and Italy perhaps double that to construct two pipelines linking Iraqi oil fields to Saudi Arabia's Red Sea port of Yanbu, says a French trade official, Reuter reports from Paris.

Iraq has suffered a sharp cut in oil exports as a result of its four-year war with Iran. The two pipelines, begun last month and due to be completed in 11 months, will add 1.6m b/d to Iraq's oil exports.

World Economic Indicators

INDUSTRIAL PRODUCTION (1975 = 100)

	Oct. '84	Sept. '84	Aug. '84	Oct. '83	% change over previous year
U.S.*	165.2	165.2	166.1	155.0	+6.6
	Sept. '84	Aug. '84	July '84	Sept. '83	
W. Germany	116.2	118.3	107.6	116.0	+0.2
France	116.0	117.7	117.7	114.0	+1.7
Italy	126.5	125.9	119.7	118.0	+7.2
Netherlands	117.0	116.5	114.5	109.3	+7.0
UK†	100.8	99.5	99.4	102.4	−1.8
Japan†	116.9	118.0	117.2	107.5	+8.7

* 1967 = 100. † 1980 = 100.
Source (except U.S., UK, Japan): Eurostat

GM enters £100m joint venture in Mexico

By William Orme in Mexico

GENERAL MOTORS of the U.S. is entering into a US$100m (£83m) joint production venture with Mexico's state-owned bus and lorry manufacturer, the two companies have announced here.

Diesel Nacional SA, a Government-controlled group known commercially at Dina, will own 60 per cent of the equity in the joint venture. GM will control the remaining 40 per cent of the enterprise and will manage its international marketing operations, company representatives said.

GM is investing about $40m in the venture, while Dina is providing the equivalent of $60m in currently under-utilised assembly installations, said Sr Joaquin Vasquez Manzanero, a Dina official.

By 1987, the jointly-owned firm is expected to be producing some 50,000 vehicles yearly, mostly for the U.S. market, with annual export earnings projected at US$400m to US$500m.

Mexico's foreign investment laws restrict domestic sales in manufacturing of heavy diesel-powered vehicles to firms controlled by Mexican capital. GM's acceptance of a minority equity share in a new manufacturing venture here "demonstrates with facts that (Mexico's) foreign investment policy, far from being an obstacle to the participation of that capital, provides security and confirms the existence of the proper climate" for international investment, said Sr Hector Hernandez, the Mexican Commerce and Industry Minister.

The GM-Dina venture, which will necessitate the expansion of Dina's manufacturing facilities in Mexico's Ciudad Sahagun north-eastern industrial district, will employ some 10,000 assembly workers.

Terry Dodsworth in New York adds: GM has had manufacturing facilities in Mexico since 1935 through its wholly-owned subsidiary GM de Mexico, which does not fall under the new minority ownership rules for foreign companies. Its main investments are concentrated in three assembly plants for trucks, cars and engines in Mexico City, Toluca and Ramos Arizpe, although it also has about 10 small component facilities grouped near the U.S. border making parts for export to the U.S.

Christian Tyler on tne U.S.'s campaign to free trade in services

Fighting to dismantle the barriers

FOR ABOUT three years the U.S. Administration has been trying to get the world to take seriously what it regards as the trade issues of the 1990s and beyond: services, high technology and overseas investment.

Last week its negotiators secured a limited tactical victory at the annual meeting in Geneva of the General Agreement on Tariffs and Trade (GATT). Against stubborn opposition from a suspicious Third World, they succeeded after seven days of procedural wrangling in accelerating the research into ways of dismantling barriers to trade in invisibles.

Service industries account for about 70 per cent of employment in the U.S. and are soaking up most of the new entrants to the labour market. The ratio is similar in the UK, which relies heavily on the export of services to balance its trade deficit in food and manufactured goods.

Cross-border transactions in banking, insurance, telecommunications and techonlogy combined with air and sea transport and tourism spending, are estimated to be worth $500bn (£416bn) a year. But analysis of the trade is fraught with definitional and statistical difficulty.

For example, the global trading account shows a $100bn "deficit," almost certainly the result of under recording of invisibles. And there is the further complication of distinguishing between overseas sales and barriers to the right of establishment in foreign markets.

New York, London and Hong Kong may allow foreign banks to operate freely but many countries limit them severely.

There are still few explorers in this labyrinth. Work is being done by a handful of economists at the OECD, the IMF and the European Commission. Work is also starting informally in the Gatt using raw materials provided so far by only eight countries.

Even within the EEC—and despite the requirements of the Treaty of Rome—many governments guard their domestic service industries jealously.

U.S. researchers claim that, especially in the telecommunications field, the barriers to trade are rapidly multiplying.

Personal privacy, national security and commercial prudence are invoked by governments to justify the exclusion or close control of foreign entities. In Third World countries local presence, often under local control, is becoming obligatory for any company—manufacturing or service—that wishes to sell in the market.

Even in the industrialised world there are restrictions on the deployment of personnel. Professional qualification earned in one country is not necessarily acceptable to another.

The U.S. campaign is motivated not just by free market ideology and national self interest. The Administration is being pushed by a powerful lobby, the coalition of service industries, led by American Express. Amex, with hundreds of thousands of card transactions to register daily, complains that it is at the mercy of national telecommunications organisations who, it claims, charge discriminatory prices for use ofr their telephone lines.

In the UK which has given broad governmental support to the U.S. on this issue, the City of London has its own lobby, the Liberalisation of Trade in the Services Committee (Lotis).

The Japanese have also declared their support for worldwide negotiations of free ing trade in services.

But elsewhere the response has been lukewarm at best even in Western Europe.

The process started last week is a very modest beginning. There is a lot more academic and diplomatic work to be done, before barriers to trade in services become negotiable in the GATT and the U.S. may not be prepared to wait that long.

Steel row confused by sense of betrayal

BY NANCY DUNNE IN WASHINGTON

A judge of the U.S. Court of International Trade refused on Friday to lift the embargo on imports of European steel pipe and tube imposed by the U.S. Administration, reports AP from New York. The American Institute for Imported Steel, a trade group for steel importers, sought a temporary restraining order to lift the prohibition that took effect at midnight Thursday. However, Judge Dominick Dicario said prospects of overturning the embargo are so slim that a restraining order was not justified.

THE LONG-SIMMERING U.S.-EEC dispute over steel pipes and tubes has left both sides boiling this week with righteous indignation following a U.S.-instituted temporary ban on imports.

Viscount Etienne Davignon, the EEC Commissioner for Industry, announced his "dismay," folllowing last week's U.S. decision. He is quoted as saying: "The U.S. says it rejects protectionism, but actions like this show they don't stick to their commitments."

This echoes precisely what U.S.officials are saying about the Community. They feel betrayed about the centre-piece of the dispute—a 1982 pipes and tubes import "understanding," which now seems rather to be a misunderstanding.

U.S. officials say they regarded the 1982 pact as a "serious commitment," under wihch there were to be regular consultations in the event of problems. They say it was worded vaguely because of political problems within the Community.

The "understanding" embodied in an EEC letter, written to Mr Malcolm Baldrige, the Commerce Secretary, by Viscount Davignon, notes the wish of the U.S. to avoid diversion of steel products towards pipes and tubes and gives its opinion that such exports will not exceed 5.9 per cent of the U.S. market. It agrees that, in case of a distortion of the pattern of U.S. trade within the pipe and tube sector, consultation will take place.

EEC officials now say that the pact was "a forecast . . . a commitment to try" to limit exports to 5.9 per cent of the U.S. market.

Imports declined immediately after the letter's appearance but then surged dramatically this year to over 14 per cent of the U.S. market. Informal talks to resolve the new problem began in late 1983. But headway was only made when a U.S. embargo on pipes and tubes was threatened, and Mr Bill Brock, the U.S. trade representative met Viscount Davignon informally last month.

The two agreed to try for a deal limiting EEC penetration to 7.6 per cent. However, several exceptions from that limitation were felt by the Americans to be defined so broadly that penetration could rise to 13 per cent.

EEC officials said the U.S. has no legal basis for the limiting of pipe and tube imports since the International Trade Commission last summer failed to find they had injured American producers. U.S. officials say they have all the authority they need in the 1984 Trade Act, which presumed that the EEC had a binding commitment to the 5.9 per cent level.

U.S. officials claim, but have yet to identify, differences in Mr Brock's understanding of his agreement with Viscount Davignon, and the mandate approved by the EEC ministers. However, the Viscount insisted that the council gave "a full OK" to the proposed 7.6 per cent agreement "not changing a single comma of what had been the weekend's talks."

While the two disiputants are worried about the dangers ahead in mutual trade relations and express the desire for a peaceful settlement both are maintaining tough stances.

The EEC is looking at a list of U.S. products for retaliation, which may bring about further bitterness. U.S. producers of oil industry tubular goods are threatening to file unfair trade cases against the Community to extend the temporary embargo into next year on the grounds of huge inventory build-ups as a result of the import surge.

The failure on the two sides to agree even on what was once agreed upon, bodes ill for the tough round of trade talks that will be needed to resolve this latest impasse.

SHIPPING REPORT

Japan helps big tankers make a comeback

By Andrew Fisher, Shipping Correspondent

THE BIG ships started to come into their own again on the tanker market last week. Six vessels above 200,000 deadweight tons were reported as having been fixed from the Gulf, four of them for Japan.

The largest was the Minotaur, a ULCC (ultra large crude carrier) of 386,000 dwt capacity, which was chartered to take a part cargo of 330,000 tons of oil from Kharg Island in Iran to the Red Sea.

The rate was Worldscale $2.50, slightly down on previous weeks' levels. But the Worldscale 27 secured for the Lombard, a 220,000 dwt VLCC (very large crude carrier), for Japan was a modest advance.

Two other VLCCs, World Dignity and Japan Aster, were fixed at around the same rate from southerly Gulf ports. But a 10 point premium at Worldscale 37 was obtained for Harmony Venture to Japan from the more hazardous Kharg terminal.

Two tankers featured on last week's sale and purchase market. One was a 10-year-old VLCC of 232,400 dwt, the Swedish-built Kaia Knudsen under the Norwegian flag. She went to Conoco for a reported $7.5m, said Galbraith's.

The much smaller Oktania, 34,800 dwt, was sold to Norwegian buyers for about $10.5m. She is only three years old, also built in Sweden, and flying the Swedish flag.

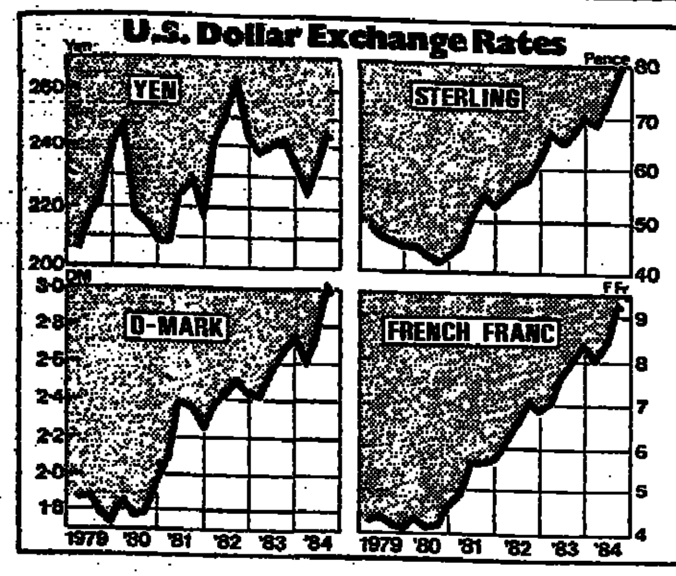
Among the larger sized tankers, Opec's attempts to hold prices by squeezing output could cut demand in the shipping market, according to Drewry Shipping Consultants. Fourth-quarter tanker demand would be only 139m dwt if Opec stuck to its reduced 16m-barrels-a-day target.

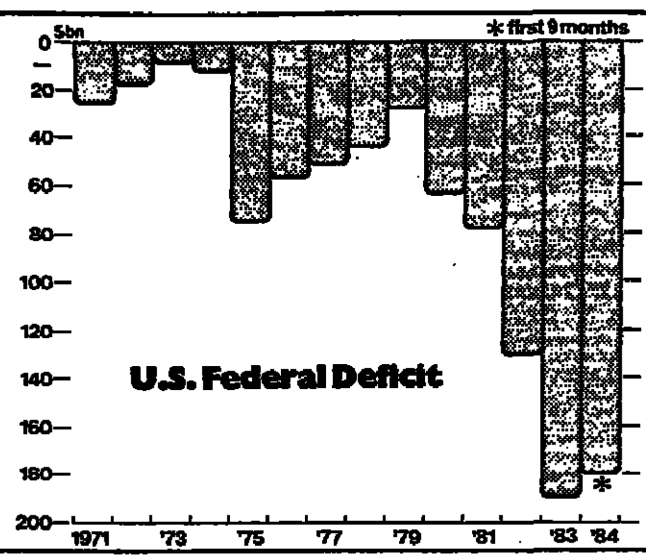
This would compare with 147m dwt if Opec reached the old 17.5m-barrel ceiling set in March 1982, or 156m dwt at 19m barrels.

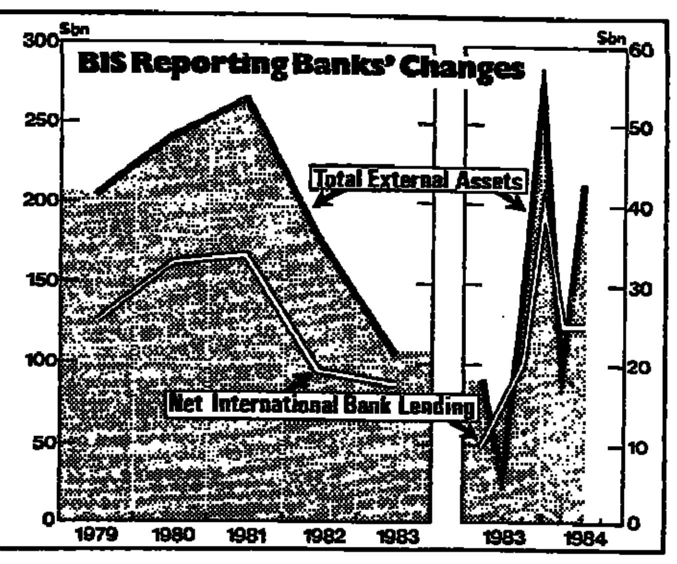
Iran oil exports rise

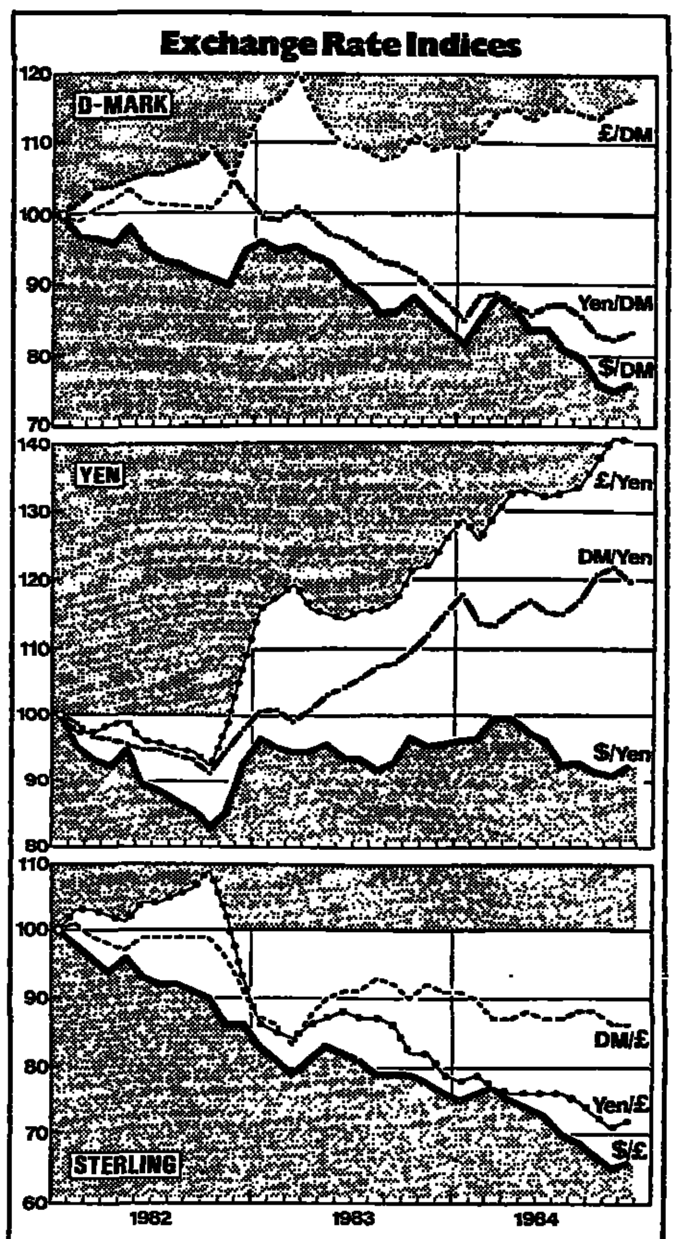
IRANIAN oil exports have risen to nearly 2m barrels per day and could rise higher as Iran tries to make up a shortfall in foreign exchange earnings, diplomats said, Reuter reports from Tehran.

STATISTICAL TRENDS: CURRENCIES









Dollar establishes enduring dominance

THE U.S. DOLLAR continues to dominate the world's currencies despite long-standing predictions of a retreat from its record run, which since the beginning of 1981 has brought an appreciation against sterling of 100 per cent and against the Deutsche mark of 50 per cent.

The yen has suffered less, falling in value by around 20 per cent over the same period, and by only 6 per cent in the year to October.

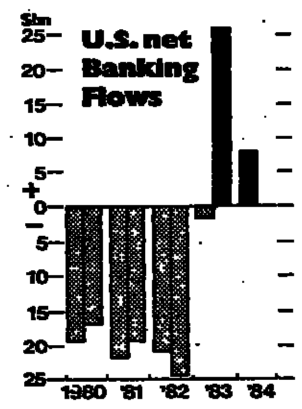
Meanwhile the U.S. current account deficit has grown dramatically to an estimated $100bn this year, and the federal budget deficit has climbed to an estimated $200bn plus. Neither seems set to fall in 1985.

The deterioration in the U.S. invisibles account has been particularly sharp, with the surplus dropping to its lowest level for 10 years in the second quarter of 1984. Bigger payments of interest, profits and dividends abroad—arising from increased foreign investment in the U.S., would suggest that there will be further deterioration. The trade account should benefit from a slowdown of U.S. growth relative to other industrial countries, though this will not completely offset its lack of competitiveness.

The U.S. inflation differentials with West Germany and Japan have narrowed considerably, down to about 2 per cent in each case.

The rise in inflation in the U.S. expected as a result of the growth surge has so far been modest, and has therefore not exerted a downward pull on the dollar.

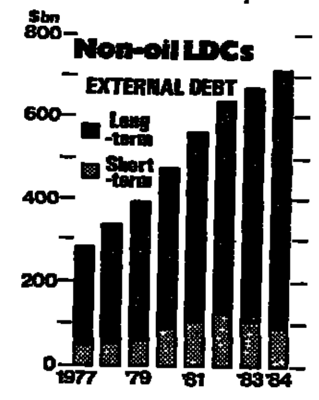
The dollar's strength has been based partly on high interest rates attracting foreign capital flows, particularly into the bond market. Much of this investment has come from Japan.



The dollar has also been supported by the substantial fall in international bank lending, leading to a shortage of dollars in the foreign exchange markets. Overseas lending by U.S. banks moved from $45bn in 1982 to a net repayment of $24bn in 1983. The first six months of 1984 show a net repayment of $8bn, but this hides a sharp rise in the second quarter in both inflows and overseas lending.

Capital outflows from Japan were particularly large in the summer, and mostly in the form of portfolio investment rather than banking flows.

Japanese investors were attracted by the high yields offered by dollar-denominated bonds. Since then, there has been some slackening of outflows, and a rise of foreign investment capital in Japan. The strength of the yen has been based on the external surplus achieved this year, which has been related to the boom in the U.S. economy. If the U.S. growth rate does not rebound from the third quarter's 1.9 per cent figure, the yen could suffer.



What was otherwise a weak U.S. equity market over the year to October has given attractive returns to European investors because of the strong dollar. However, the greatest returns were in Japan with the combination of a strong market and a strong yen.

The current account deficit may prove more difficult to finance in 1985, and with U.S. banks renewing their overseas lending they may not invest as heavily in Treasury securities as they did last year. U.S. economic growth in real terms next year could be around the level of that forecast for the UK and West Germany at 2½ to 3 per cent.

Real GNP Growth

% change

	U.S.	UK	W. Ger.	France	Japan
76	4.9	3.6	5.4	5.2	5.3
77	6.2	1.3	3.1	3.1	5.3
78	4.7	3.7	3.1	3.8	5.0
79	2.4	1.6	4.1	3.3	5.1
80	−0.3	−2.0	1.9	1.1	4.9
81	2.3	−2.0	0.2	0.2	4.0
82	−1.9	1.8	−1.1	2.0	3.0
83	3.7	3.3	1.3	0.7	3.0
84†	6.8	2.1	2.5	1.4	5.5
85†	3.0	3.1	2.5	2.0	4.5

† Estimate.

Source: OECD/Phillips & Drew

Net Long Term Capital Flows

U.S. $ bn

		1981	1982	1983	1984 Q1	1984 Q2
U.S.	Portfolio	4.5	5.4	9.7	3.6	6.3
	Direct	12.3	19.6	6.4	−2.3	9.2
Japan	Portfolio	3.2	0.3	−6.9	−2.8	−9.5
	Direct	−4.7	−4.1	−3.2	−1.5	−1.7
W. Ger.	Portfolio	−2.4	−3.7	1.1	1.7	−1.4
	Direct	−3.3	−2.3	−1.8	−0.2	−0.5
UK	Portfolio	−7.6	−10.1	−6.8	−3.8	−0.9
	Direct	−7.5	−2.6	−1.0	−0.9	−6.6

Source: Wood McKenzie

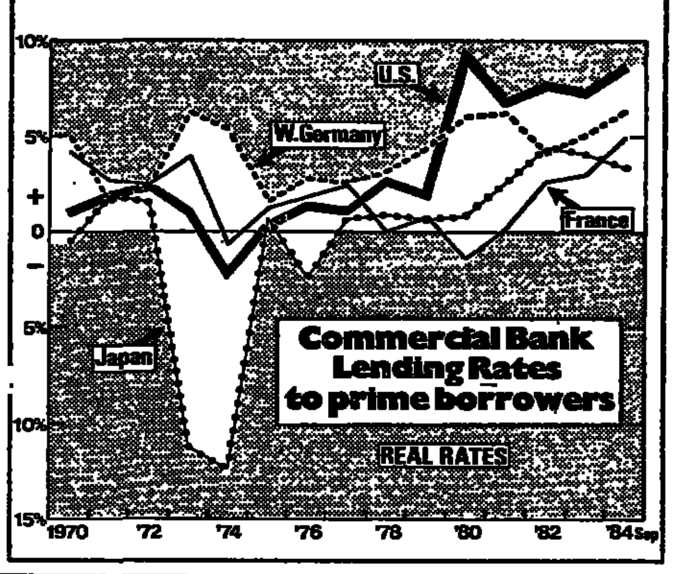
Current Account Balances

$bn

	U.S.	UK	W. Ger.	France	Japan
76	4.4	−1.6	3.9	−3.4	3.7
77	−14.1	−0.1	4.1	−0.4	10.9
78	−14.8	1.9	9.0	7.0	16.5
79	−0.5	−1.6	−6.1	5.2	−8.7
80	1.5	6.8	−15.7	−4.2	−10.7
81	4.6	13.3	−6.4	−7.3	4.8
82	−11.2	9.3	3.3	−12.0	6.9
83	−41.6	4.4	3.9	−4.4	21
84†	−100.0	1.0	2.7	−2.5	33

† Estimate.

Source: OECD



Trade Weighted Indices

January 1982 = 100 End of Quarter

		UK	U.S	W. Ger.	Japan	France
1982	Q1	99.2	105.7	101	94.7	98.8
	Q2	99.6	109.7	102.6	93.9	92.9
	Q3	99.8	112.5	102.7	90.6	90.9
	Q4	91.9	107.9	105.8	101.9	93.9
1983	Q1	88.7	111.8	107.6	102.7	88.9
	Q2	91.9	113.7	105.2	104.2	86.6
	Q3	90.4	115.4	103.7	108.4	84.5
	Q4	90.4	117.7	102.5	111.1	82.8
1984	Q1	87.4	115.0	104.8	112.9	84.1
	Q1	86.3	121.9	102.7	110.0	82.6
	Q3	83.5	129.2	99.4	110.6	80.0
	Nov	81.9	128.3	100.1	110.6	80.5

% Return on Equities*

Year ending Oct 84

INVESTING FROM	INVESTING IN U.S.	UK	Japan	W. Ger.
U.S.	3.6	3.4	17.5	−4.0
UK	27.9	27.2	44.9	18.0
Japan	10.1	9.6	24.6	2.1
W. Ger.	21.9	22.3	38.4	13.3

* Including exchange rate gain or loss.

Source: FT

Commentary by Our Economics Staff; data analysis by Financial Times Statistics Unit; charts and graphs by Financial Times Graphics Department.

Portfolio Investment U.S.

$bn

	80	81	82	83	84 Q1	84 Q2
INFLOW						
Equities	4.2	5.1	3.6	6.4	1.2	0.0
Direct	3.8	5.1	9.5	10.9	1.7	7.1
OUTFLOW						
Equities	−2.3	−0.2	−1.4	−4.0	0.3	0.0
Direct	−1.2	−5.5	−6.6	−3.7	0.3	−0.8
Net foreign official purchases of U.S. Govt. Securities	11.9	6.3	5.1	6.5	−0.3	−0.2

Source: Wood McKenzie

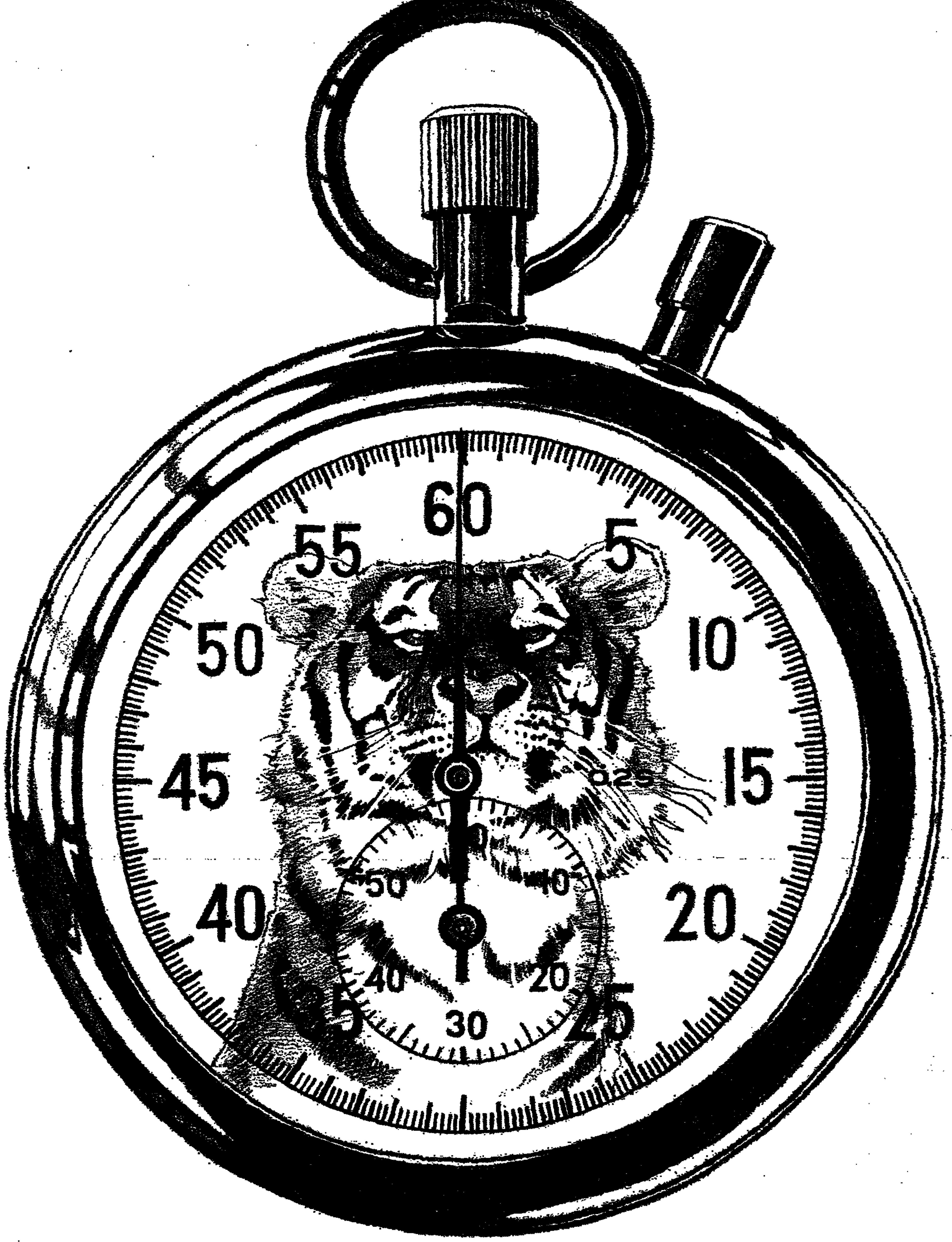
Inflation

% change annually

	U.S.	UK	France	W. Ger.	Japan
1973	6.3	9.1	7.4	6.9	11.8
74	10.9	16.0	13.7	7.0	24.3
75	9.2	24.2	11.7	5.9	11.9
76	5.8	16.5	9.6	4.3	9.3
77	6.5	15.9	9.4	3.6	8.1
78	7.5	8.3	9.1	2.8	3.8
79	11.3	13.4	10.7	4.1	3.6
80	13.5	18.0	13.3	5.5	8.0
81	10.4	11.9	13.3	5.9	4.9
82	6.2	8.6	12.1	5.3	2.6
83	3.2	4.6	9.5	3.0	1.9
84†	4.3	5.0	7.5	2.4	2.3
85†	4.6	5.3	5.9	2.3	2.8

† Estimate.

Source: IFS



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National Health Service

Getting to grips with cash outflow

Arnold Kransdorff on steps being taken to budget within a major British bureaucracy

FOR THE past four years Ian McKinlay and his colleagues, all skilled workers, have been battling to get their bosses to replace three bits of equipment vital to their job. Total cost: just over £30,000. Yet the section of the organisation for which they work has an annual revenue budget of over £7m.

The reason for their fight is that their machines have virtually worn out. Though still operable they have been completely out of service for periods totalling three weeks since July. To keep just one of them going has cost £1,500 so far this year—and the money for this has come out of someone else's departmental budget.

The problem is that McKinlay's employers admit to knowing nothing about efficient cash management. In fact, the only budgeting the organisation does is to try to work within a strict cash limit with small functional groups of employees putting their case for a slice of the cake.

In the real commercial world this approach would, they concede, provide a one-way ticket to the bankruptcy courts. But their business has nothing whatsoever to do with profit and loss accounts and dividends.

McKinlay is a consultant neurologist at the 200-bed Booth Hall Children's Hospital in Manchester, run by the National Health Service, and into which the Government is trying to inject an element of professional management.

With a payroll of more than 800,000 employees and a total revenue budget of £9bn, the NHS is effectively Europe's largest business entity with an equally large reputation for managerial inefficiency.

In February last year the Government appointed Roy Griffiths, deputy chairman and managing director of the supermarket group, J. Sainsbury, to investigate the NHS's management structure and systems. One of his recommendations was the introduction of so-called management budgets, a prescription which little Booth Hall intends to carry out in novel form just as soon as it gets the go-ahead, possibly early next year.

Along with about a dozen other hospitals across the country, Booth Hall has just completed a pilot project which it hopes will streamline its present nondescript budgeting system and, in the process, solve McKinlay's problems concerning the replacement of vital medical and surgical equipment.

Generally, the object of the pilot projects has been to design systems which involve doctors more directly in the budgeting process. The theory is that doctors are ultimately responsible for much of the expenditure in a hospital, so they should be made more accountable for it.

Against this background a debate has arisen over whether doctors should get involved in cash-related management decisions and the extent to which commercial principles are valid within the NHS.

Apart from this, the pilot projects have largely concentrated on techniques to impose recording systems so that doctors can receive reliable information concerning the expenditure for which they are responsible.

Thus, when these figures look as if they are going to exceed their pre-fixed limit, ways can be considered of cutting back.

In strict commercial terms, these budgeting systems would get no prizes for sophistication or flexibility. They merely provide a crude, albeit valuable, tool to measure historical costs.

In adopting a different approach Booth Hall has concentrated on developing a computerised management system to calculate a standard cost for a representative patient, against which the actual cost can be measured, rather than just refining the hospital's recording systems.

Booth Hall believes that the budgeting exercise becomes more effective when the yardstick is realistic rather than arbitrary—as in the case of the "top-down" cash allocation.

The system, they claim, is also flexible enough to allow for several other refinements.

It can, for example, allow doctors to plan ahead, they say. Future budgets can be accurately calculated to take account of any predicted changes in patient numbers as a result of such factors as changing lifestyles and Government policy decisions.

In addition, it can be used rapidly to assess the cost implications of a change in treatment patterns — a not infrequent occurrence at a teaching hospital in the forefront of medical science.

Booth Hall has devised the system with the help of management consultants Deloitte Haskins & Sells. Dennis Sherwood, a Deloitte partner and the main architect of the scheme, says that the main object of the budgeting system was to influence the behaviour of doctors, so that when there was an adverse variance to deal with, the individual was motivated to do something about it.

"To ensure this happens, a budget holder must be intimately involved in the budget-setting process, or he or she will not be committed to it. Furthermore, the budget itself must be a good 'simulation model' of the real world and be flexible enough to take account of changes in activity levels so that forecasting errors, inevitably inherent in all original budgets, do not distort the interpretation of the management reports during the course of the budgeted year."

To do this Sherwood and his colleagues have helped Booth Hall devise a budget-setting process based on treatment profiles. The approach has focused on U.S. research into medical classification systems, in particular one called the Diagnostic Related Group, which has defined 467 different medical conditions.

Sherwood explains: "The doctors are asked what resources are needed to treat a typical patient for a particular condition. They then come up with a recipe for a treatment profile — a best estimate of resources to treat a typical patient with that class of complaint.

"The doctor then does an estimate of the number of admissions expected. By multiplying the number of expected admissions by the treatment profile figures, one gets a physical resource budget.

"The next step is to aggregate the total resources required by all the doctors. This gives a total financial budget, giving everything from the projected cost of aspirins to nursing staff and meals.

"With this budgeting information hospital management can then assess the overall cost and make sure that it is compatible with the fixed cash limit. If there is a problem, it then becomes easy to reassess the target case mix of admissions, or indeed the treatment; it becomes easier to make trade-offs and understand their implications.

"The system can also be used to estimate and forecast the demand made on the hospital diagnostic departments such as pathology or X-rays, so that consultants responsible for those services can plan their department's work.

"Equally important is the fact that the system enables hospital management to take a view during the year so as to be confident that they will not exceed the annual cash limit.

"All we have done is to give doctors a similar responsibility to that of the factory manager."

Gordon Greenshields (centre), general manager of the North Western Regional Health Authority has a budget of £860m. doctors Tim David (left) and Ian McKinlay will soon be involved in a system to decide how their unit's allocation is spent

BUDGETING in the National Health Service is crude, strongly influenced by national and local political forces and subject to the bargaining strengths of individual employee pressure groups at hospital level.

It revolves around a system of fixed allocations which percolate down from the Government to regional and district health authorities; they, in turn, pass on fixed sums to individual units such as hospitals and health centres.

Every autumn the Government decides on its allocation for the Department of Health and Social Security.

Once the DHSS has this, it splits it up among its 14 health regions in England and Wales. Scotland and Ulster are funded separately.

Then, each regional authority in turn makes allocations to individual districts. A region has between eight and 22 districts. Like the DHSS, regional authorities base their allocations on precedent and population but also take into account any major capital outlays and projects such as health visiting.

Once the funds reach district level, budgets are once again mainly influenced by historical allocations. But also taken into account are inflation, wage awards and such factors as building maintenance and changes and patterns of health care.

At this level, an increased allocation to one functional group would generally have to be offset elsewhere. Equally, an overspend by any group would generally lead to a deduction in the following year's budget.

It is generally accepted that much needs to be done to improve the quality of budgeting within the NHS.

Gordon Greenshields, who as general manager of the North Western Regional Health Authority is responsible for a budget of around £860m in 19 districts, says that functional decision-making is too often taken at too high a level.

"Up to now we have managed despite the management structure, rather than because of it. The system has encouraged a behaviour pattern where few managers take any initiative or stick their necks out.

"Usually far too much consultation and decision-making is arrived at through consensus, usually coming about through default. We end up with decisions which emerge from the lowest level of resistance. We do not necessarily get the best decision, rather the one most acceptable to the most people."

Greenshields is optimistic about the new management changes. "What we are looking for is accountability and responsibility from the bottom. We have a lot of good managers who have not really had a chance to be managers. With the shackles taken off, I would think that the NHS will be an efficiently managed organisation in five years' time."

He dismisses the argument that doctors should not get involved in management. "At the end of the day good management of resources will lead to more and better health care."

One of his managers one rung down the ladder is Mike Brown, administrator of North Manchester Health District, who controls a budget of £18m to run six hospitals, two health centres and 14 community projects.

His attitude is equally dismissive of the current management system. "We don't have a management system. It is purely a means of constraining expenditure on cash limits. As managers we have no means of knowing whether resources are being spent efficiently."

But at the level where much of the responsibility for budgeting will now rest—the doctors—a great deal of scepticism is attached to the new system, although there is widespread acceptance that the current procedures are highly unprofessional and in need of radical overhaul.

Dr John Keen, a consultant paediatrician, admits that the present budgeting system is inefficient. He welcomes the new system but has reservations.

"Many of my colleagues feel that this is just another ploy to impose a financial ceiling. However it looks to be a more efficient way of going about things, provided we have access to all the information we need, and we're given the time to manage, and the training to know how to do it."

Although he welcomed the introduction of more professional budgeting into the NHS, Dr Tim David, another consultant paediatrician, was concerned that the new budgeting system would lead to a situation where doctors were not free to treat patients as they would wish. He was also worried that it would be "a significant consumer of time. If you want to increase my output, give me my own secretary."

Management abstracts

Computer control at a bakery. P. J. Kelley and J. A. Collins in Management Accounting (U.S.), Feb 84

Describes how the Good Stuff Bakery in Los Angeles uses hand-held micros fitted to each delivery vehicle to market, order, and invoice its bakery products; at the end of the day, the micros are linked into the mainframe which prepares accounts and produces production schedules/order requests for the next delivery day; leads to less paperwork/wastage; more marketing information, and readily-accessible distribution times.

New balance sheet for managing productivity and growth. H. B. Ernst in Harvard Business Review (U.S.), Mar/Apr 84

Argues that liquidity and growth ought to be regarded as opposites, and demonstrates how their relationship can be highlighted by re-arranging the balance sheet, so that inventory is not treated as a current asset, and the other net current assets are grouped as a measure of liquidity; uses a series of examples—focusing mainly on IBM—to show how this approach can be used to plan strategies for growth and financing.

Employee involvement. J. Goodlad in Management Accounting (UK), May 84

Reports on the results of a survey of companies in the north west on the involvement of non-managerial employees in the budgeting and monitoring processes; relates this to legal requirements to report upon employee involvement, but—despite a desire to confirm—finds the actual situation rather discouraging.

Adapting products to local tastes. J. S. Hill and R. R. Still in Harvard Business Review (U.S.), Mar/Apr 84

Reports on a survey of the ways in which multinationals adapt their products in transferring consumer goods to less-develped countries; analyses the adaptions in terms of mandatory changes (to fit local legislation), and voluntary changes (to meet the vagaries of local customs and market behaviour).

These abstracts are condensed from the abstracting journals published by Anbar Management Publications. Licensed copies of the original articles may be obtained at £3 each (including VAT and p & p; cash with order) from Anbar, PO Box 23, Wembley HA9 8DJ.

UK NEWS

MINERS' UNION HAS £4.6m IN LUXEMBOURG BANK

NUM receiver to demand funds

BY RAYMOND HUGHES, LAW COURTS CORRESPONDENT

MR HERBERT BREWER, the High Court-appointed receiver of the assets of the National Union of Mineworkers, plans to go to Nobis-Finanz International in Luxembourg this morning to take possession of the union's £4.63m of dollar bearer bonds being held by the bank.

He will be accompanied by some or all of the four partners in Price Waterhouse, the London chartered accountants appointed by the court to sequester the NUM's assets following its refusal to pay a £200,000 contempt of court fine. Mr Brewer was appointed by the court after the NUM refused to pay the fine.

Mr Brewer, solicitor, will produce the court order making him the receiver of the "income, assets, property and effects" of the union. He will explain that he is the only person authorised to recover the funds, the union's three trustees – Mr Arthur Scargill, Mr Mick McGahey, and Mr Peter Heathfield – having been removed from office on the court's order.

Their removal automatically cancelled the authority of Mr Terence Cave, the NUM's head of administration, and Mr Stephen Hudson, its chief finance officer, in whose names the £4.63m is held in the Nobis account as nominees of the trustees.

Mr Brewer will also tell the bank that his duty is to hand the funds over to the sequestrators, whose authority from the court will also be available for the bank's inspection.

If the bank demurs, Mr Brewer and the sequestrators will seek an order requiring its compliance from a Luxembourg court.

The way was finally cleared for Mr Brewer to make his Luxembourg trip shortly after 6pm on Saturday when, at an emergency sitting of the Court of Appeal, the trustees' appeal against Friday's High Court order that they be removed and replaced by the receiver was dismissed.

Mr Scargill, the NUM president, Mr McGahey, the vice-president and Mr Heathfield, the general secretary, were in court to hear Lord Justice Stephenson say that their appeal would be rejected because they would not undertake to purge their contempt by promising to obey all court orders, past and future, made against them.

The judge, sitting with Lord Justice O'Connor, and Lord Justice Slade, expressed the hope that such an undertaking would be forthcoming after an emergency meeting of the union's national executive.

If that happened, he said, the trustees could renew their appeal.

The judges refused leave to appeal to the House of Lords, saying that if the trustees wanted to challenge their ruling they would have to seek leave from the Law Lords. Petitions for leave to appeal to the Lords are normally heard on a Thursday.

The order removing the trustees and appointing the receiver, which is effective until another High Court hearing on Thursday, had been made on an application by 16 working miners.

Saturday's appeal was strongly resisted by their counsel, Mr David Oliver, and by counsel for the sequestrators, Mr Howard Page.

Mr Oliver said that the trustees had committed a series of deliberate, premeditated and flagrant contempts of court orders and had placed the union's funds in jeopardy.

Mr Page urged the court not to accept an undertaking offered by the trustees not to touch the Luxembourg account pending next Thursday's hearing. Given their past conduct it would be "nothing more than a mockery of these proceedings," if they were given more time to further their own purposes.

Lord Justice Stephenson asked the trustees' counsel, Mr William Stubbs QC: "Have you got instructions to undertake to the court that your clients will obey all existing orders of the court and all future orders which the court may make against them?"

Mr Stubbs replied that he had not.

He urged the judges to allow the appeal. If they did not, the union's Sheffield headquarters would have to be handed over to the receiver, not a single telephone call could be made that involved the spending of union money and its 280 or so employees would not know if they would be paid next week.

He offered to strengthen the undertaking the trustees had offered by sending a telex to Nobis-Finanz, giving an irrevocable order that the funds there should not be touched.

Alternatively, Mr Stubbs argued, if the receiver were to remain in the saddle it should only be in respect of the Luxembourg funds, the unfreezing of all but £250,000 of which by a Luxembourg court on Thursday on the union's application had precipitated the move for the immediate appointment of a receiver.

He pointed out that had they wished the trustees could have moved the funds out between court hearings but had not done so.

Giving judgment, Lord Justice Stephenson said that at first sight it seemed a drastic and unnecessary step to remove the trustees and appoint a receiver of all the union's assets, when all that was wanted was control over the Luxembourg funds. A partial receivership would be impractical, however, because it would leave the remaining assets in a vaccum.

The £4.63m in Luxembourg represents more than half the NUM's assets, about £8m of which have been transferred abroad in an attempt to avoid sequestration. The sequestrators have frozen £2.78m in a bank in Dublin, the fate of which will be decided at a Dublin High Court hearing on December 11.

A ruling is expected shortly from a Swiss court on the sequestrators' application for the freezing of £503,000 in EBC (Schweiz), a Zurich bank.

Railway takeover plan shelved

BY PETER RIDDELL, POLITICAL EDITOR

THE GOVERNMENT has apparently lost enthusiasm for plans to privatise parts of the national rail network. This follows its refusal to intervene in support of a private sector plan for taking over the 40-mile commuter line between Fenchurch Street Station, London, and Southend in Essex. Brengreen Holdings, which had specialised in cleaning and similar contracts for local government and the National Health Service, had prepared, in conjunction with N.M. Rothschild, a feasibility study on the possibility of privatising the line.

This would have provided new services including block bookings of tickets by companies, refurbished trains and, on board, video games, a library and newspapers.

This company has now told the Government that it has decided to shelve the project for the time being because the information provided by British Rail (BR) was insufficient.

Supporters of privatisation have drawn the inference that the Government is reluctant to press BR on the issue and they argue that BR's management is dragging its feet on privatisation, preferring to concentrate resources on electrification and improving productivity.

The official view, as reflected in a recent parliamentary answer by Mr David Mitchell, a junior transport minister, is that the Government has told BR that it would "welcome proposals from it for more private sector finance and participation in the development of stations and railway services."

● Mr Bob Reid, chairman of British Rail, predicts today that during his chairmanship BR will cut by one quarter the subsidy it receives from the taxpayer (currently an annual £825m) while improving services and embarking on a £2.2bn, five-year investment programme – the biggest for 25 years.

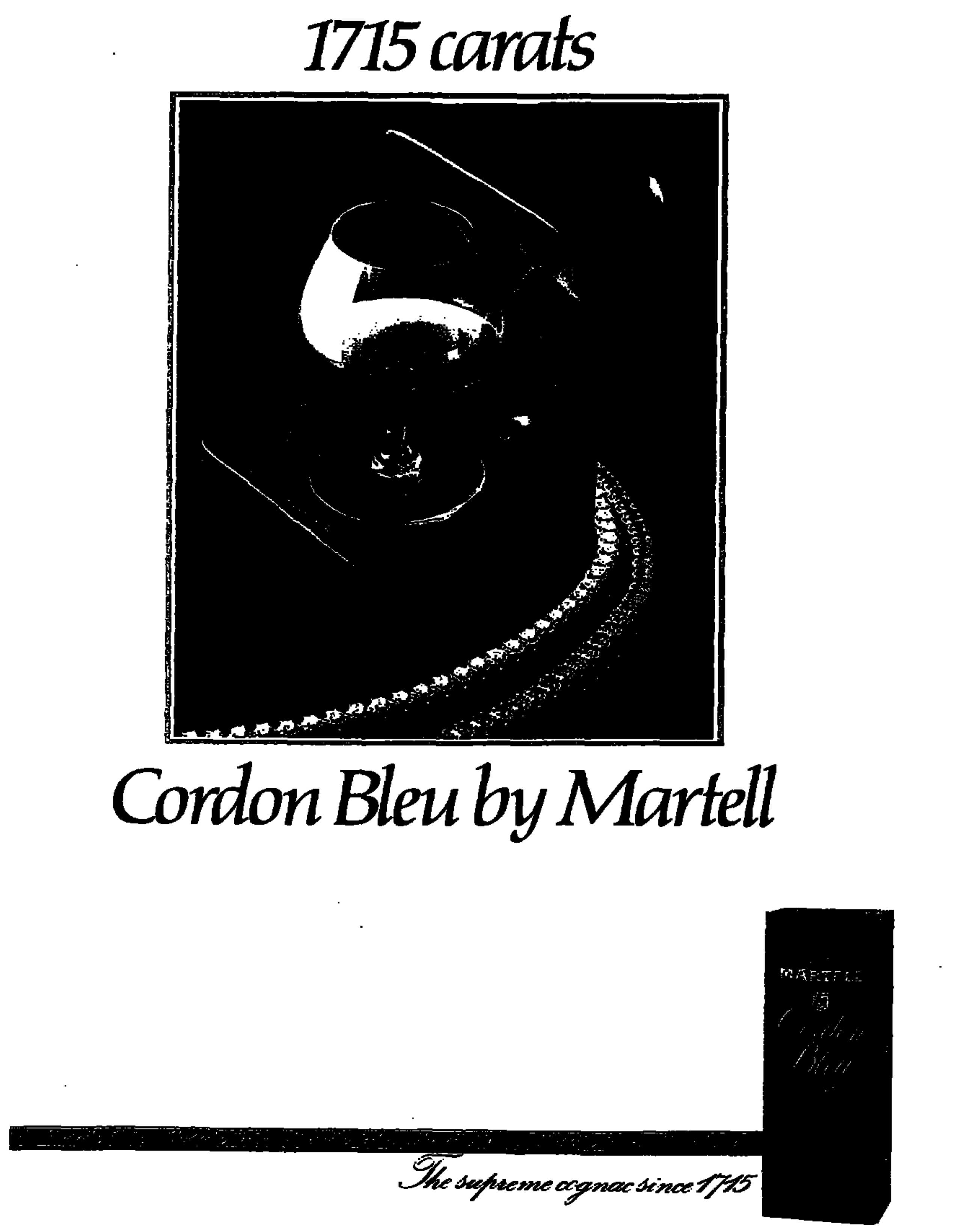
Both the Inter-City and freight businesses will move into profit, he says. Inter-City has a firm target to earn a profit of £34m by 1988-89.

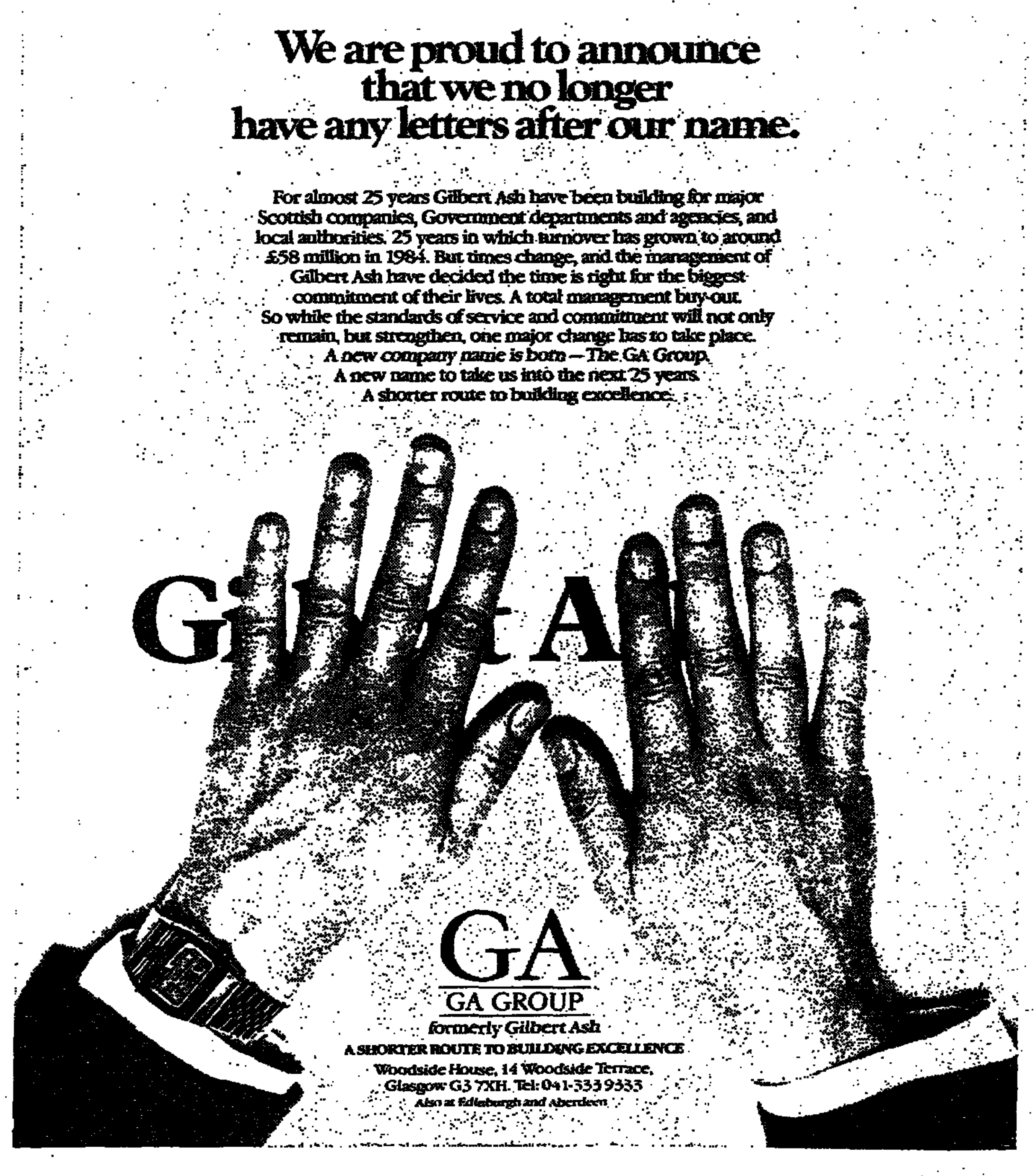
Campaign aims to halt NHS drug cutbacks

Financial Times Reporter

UK PHARMACEUTICAL companies will spend about £250,000 ($290,000) during the next 10 days on an intensive advertising campaign. It seeks to change the Government's mind about limiting the number of drugs available to National Health Service patients.

Through their trade association – the Association of the British Pharmaceutical Industry (ABPI) – the manufacturers will maintain that the proposed measures will create "a two-tier national health service medicines plan under which the elderly, the poor and the young will receive second-class drugs for many [illegible] conditions."





Thorn EMI wins £15m contract from U.S. Army

BY BRIDGET BLOOM, DEFENCE CORRESPONDENT

THORN EMI Electronics has won a £15m contract from the U.S. Army in one of the biggest international projects in defence collaboration.

Thorn will participate with companies from the U.S., France and West Germany in the development of a new guided warhead for the multi-launch rocket system (MLRS) just beginning production under a four-nation agreement.

The contract for the new warhead is with the U.S. Army's missile command. It is worth $90m to Martin Marietta of the U.S., Thomson Brandt of France and Diehl GmbH of West Germany, which with Thorn form a joint venture company, MDTT.

Work on the warhead will be carried out by a joint team from the four companies under the auspices of MDTT, working principally in the U.S. It is expected to take six to seven years to complete but is then expected to lead to multi-million-dollar contracts from the four nations.

MLRS is one of the few multinational Nato-backed projects in which the U.S. and selected allied companies are responsible for joint development as well as production. However, in the first and current phase of the MLRS project, the launchers and their rockets – which have a range of some 30 km – are in effect being built under licence. They are to come into service over the next few years.

It is understood that differences between the UK and its European partners on this so-called phase one production are now being solved. Mr Michael Heseltine, the British Defence Secretary, is said to have reached agreement with West Germany that the Royal Ordnance Factories as well as the designated German company will produce warheads for the rockets.

Mr Heseltine has been particularly keen to ensure business for the British company, which is on the verge of laying off several hundred employees. The ROF is on the Government's list for privatisation.

Max Wilkinson reports on an FT analysis of recent economic forecasts

Growth rate expected to ease

THE UK economy will grow by 3 per cent next year with the inflation rate held to about 5 per cent by the end of the year, according to an FT average of 21 recent forecasts, published today.

That is more pessimistic than the Treasury forecast in its autumn statement of 3½ per cent growth and 4½ per cent inflation, but the difference is within the margin of forecasting errors.

Most forecasters are expecting a slowdown in the underlying rate of growth of the economy next year, with about 1 percentage point of growth attributable to a "bounce back" after the assumed end of the miners' strike.

The strike has had the effect of depressing growth by about 1 percentage point this year. In 1985, the general expectation is that consumer spending and exports will continue to rise at a respectable pace with some slowdown in the rate of increase of imports.

Most forecasters have become significantly more pessimistic about unemployment since the last survey of forecasts in June, but they are somewhat more optimistic on the whole about short-term prospects for inflation.

A summary of exchange-rate forecasts and assumptions, included in the FT table for the first time, suggests a general view that sterling will depreciate by about 2½ per cent between its average values for 1984 and 1985 measured by the Sterling Index.

A modest decline in short-term interest rates is also expected, to about 9 per cent on average in 1985.

The consensus of forecasts from City of London brokers and the overall consensus of the 21 forecasters surveyed is remarkably close, with a general expectation of a slight decline in sterling and a fall of interest rates by about 1 percentage point to 9 per cent on average next year.

The City of London is, however, somewhat more pessimistic about the trend of unemployment, predicting a rise to 3.2m by the end of next year, compared with an overall consensus that it will remain broadly flat.

As with previous forecasts, the most buoyant outlook for 1985 comes from Liverpool University, which continues to believe that tight monetary policy will push down workers' expectations of future inflation and so help to moderate the rise in wage pressures. That is expected to be an important factor in reviving the economy, with a sharp rise in output expected to continue in 1986, and leading eventually to zero inflation by 1988.

That view contrasts with that of the National Institute of Economic and Social Research in its review last week. It believes that inflationary pressures will gradually increase towards the end of the decade, and that is reflected in its forecast of 6.5 per cent inflation by the end of next year. It is the most pessimistic of all the inflation forecasts except that of Data Research Incorporated, which also has 6.5 per cent.

In the absence of government stimulus to demand, the institute sees little hope of a big regeneration of the economy and is forecasting an average annual growth rate of only 1¾ per cent between 1985 and 1989.

An intermediate position between the institute's pessimism and the buoyant outlook from Liverpool, is represented by The London Business School's Centre for Economic Forecasting.

Its latest medium-term projections, up to 1988, suggest an annual average growth rate of 1.8 per cent between 1985 and 1988, somewhat better than the performance predicted by the institute, but still within reach of it.

Taking the whole period from 1981 to 1988, the London Business School suggests a trend rate of growth of about 2¼ per cent a year compared with the institute's 2 per cent a year.

A more marked difference is in the two forecasting bodies' views of the trend of inflation. The institute believes inflation will rise steadily to an annual rate of 7¾ per cent by the end of 1988, whereas the London Business School believes it will be little changed at about 4¼ per cent by then.

On unemployment, the institute and the London Business School are about equally pessimistic. Both believe that the adult total will continue to rise to about 3.3m in 1988 compared with a figure of 3.1m for the end of this year. However, the institute's slower growth forecast produces a "hump" of 3.4m unemployed in 1986 and 1987.

FT AVERAGE OF FORECASTS
(Percentage change over 12 months at 1980 prices – unless otherwise stated)

	1984	1985
Gross domestic product	2.2 (2.8)	3.0 (2.3)
Consumer spending	2.0 (2.3)	2.5 (2.2)
Exports	5.6 (5.7)	4.5 (3.7)
Imports	7.3 (6.5)	4.3 (4.2)
Retail prices (4th qtr)	5.0 (5.1)	5.1 (5.3)
Unemployment (adult m, 4th qtr)	3.1 (3.0)	3.1 (3.0)
Balance of payments current account (£bn)	0.1 (1.6)	1.3 (1.3)
PSBR (financial years, £bn)	8.4 (8.0)	7.5 (7.4)
Sterling index (1975 = 100)	78.5	76.5
Interest rates (3-month interbank)	9.9	9.2

Figures in brackets are FT average of forecasts in July 1984

Dixons seeks court ruling on battle for control of Currys

BY ALEXANDER NICOLL

DIXONS, the electrical retailer, will today ask the High Court to affirm its victory in a £250m takeover battle for control of its rival Currys.

The result was put into doubt over the weekend with an unprecedented legal challenge by Currys.

Dixons, headed by Mr Stanley Kalms, said on Friday that it commanded 50.6 per cent of Currys shares and that it was declaring its offer unconditional – allowing it, in normal circumstances, to establish control by paying for shares tendered by accepting shareholders.

Late on Friday evening, however, Currys made a final attempt to stave off defeat. With one of its shareholders, Scottish Amicable Life Assurance, it won injunctions barring Dixons from declaring its bid unconditional.

At the centre of the challenge is an attempt by Scottish Amicable to withdraw its acceptance of the Dixons offer with regard to its 0.7 per cent shareholding in Currys. S. G. Warburg, the merchant bank advising Currys, said the unsuccessful move was made "shortly after noon" on Friday.

Dixons' 50.6 per cent tally was taken at 12.15pm. Acceptances cannot be withdrawn after a bid is made unconditional, and after its announcement Dixons' increased its claimed total to 51.44 per cent.

Dixons will today seek to have the injunctions lifted, and will take control of Currys if it is successful. Urgent talks were held last night on how to resolve the very confusing situation which would arise if the injunctions were upheld.

At a hastily scheduled meeting between the City Takeover Panel, Warburg and Morgan Grenfell (Dixons' advisers), Warburg planned to seek a two or three-day standstill period during which Currys shareholders could rethink their position. It hopes that a reassessment of its defence and of the bid terms will lead more shareholders to withdraw their acceptances.

Mr Terry Curry, joint managing director of Currys, said yesterday: "I have the feeling that there were quite a few institutions which were on the verge of changing their minds and withdrawing. After Dixons' announcement, there was no point. I expect that tomorrow morning will see quite a number of withdrawals."

Warburg's plan would require Dixons to return acceptances received after 12.15pm on Friday, and not to buy more Curry shares until the standstill period was over.

Brokers in joint venture for securities market

BY JOHN MOORE, CITY CORRESPONDENT

THE CHARLES FULTON group of international moneybrokers and Cantor Fitzgerald Securities, a U.S. Government securities broker in New York, are to act as brokers for U.S. Government securities in London from February of next year.

The two groups are also planning to operate an inter-dealer broking joint venture in the restructured market in British Government securities.

The new inter-dealing broking company – to be called Charles Fulton (IDB) – is to be initially capitalised with £2m and is planned to start operating in 1986 when the new gilt-edged market becomes operational.

Last month, Wedd Durlacher Mordaunt, the stockjobber, announced that it was selling its minority interest in Charles Fulton to the Fulton management following the jobber's link with Barclays Bank.

Recently Exco International, the money broker and financial services group, revealed that it had tried to acquire Cantor Fitzgerald as part of its own attempts to set up an inter-dealing broking network. Exco is now backing a new company founded by London stockbrokers specialising in the gilt-edged market.

The Charles Fulton inter-broker dealer is expected to be owned on a 60–40 basis with Cantor Fitzgerald, with the Fulton group holding the controlling interest.

Mr Bill Foy, 42, is to be managing director of the inter-dealer broker. He established and managed the gilt-edged department at stockbroker Buckmaster & Moore. Two years ago Mr Foy joined Marine Midland Bank.

Sue Cameron writes on how the DTI operates without its injured chief

Tebbit makes his absence felt

OFFICIALS at the Department of Trade and Industry seem to be hoping – on balance and taking one thing with another as Whitehall would say – that Mr Norman Tebbit, their Secretary of State, will get well soon.

"We're a bit headless without him," confessed one civil servant – adding quickly that the work of the department was, of course, proceeding smoothly even though Mr Tebbit is still in hospital recovering from his injuries received in the IRA bomb attack in Brighton in October.

"It is like living in limbo," said another. "He's not here – but on the other hand, he's around, if you know what I mean. And from time to time, he makes his presence felt."

A third official reflected wryly on Mr Tebbit's methods of making his presence felt.

"You're sitting there enjoying the freedom of having the boss away," he said. "And then you look through your in-tray and you find a brief missive saying: 'Hope you're not spending too much of my money while I'm away.' You wonder what on earth it is. And then you see that it's signed Tebbit."

Yet in theory there is no shortage of stand-ins to take over the leadership of DTI during Mr Tebbit's enforced temporary absence. The department has no fewer than three ministers of state of whom the most senior is Mr Paul Channon. It also has a full complement of junior ministers and it boasts a brace of permanent secretaries – the top rankers in the civil service hierarchy.

Most officials believe that a more aggressive minister than Mr Channon would have seized the opportunity to establish himself as Acting Secretary of State in Mr Tebbit's absence. Mr Channon, however, who is responsible for trade, spends much of his time in foreign parts. As one civil servant was heard to remark: "Even if Channon had had a mind to take the lead, I doubt if he could have found the time. Mr Tebbit has left him anywhere near their areas of responsibility."

The "other two" in this context are Mr Norman Lamont and Mr Geoffrey Pattie, both ministers of state at DTI and both apparently regarded as able men by their officials. Civil servants are usually quick to sum up their political masters and even quicker to criticise if they find them wanting. Few things bring forth such venom in Whitehall as a weak or incompetent minister.

DTI people contrast the rectitude of Mr Channon with the more high profile approach of Mr Ken Baker, Minister of State at the Department of the Environment. When his boss, Mr Patrick Jenkin, Secretary of State for Environment, was hurt in a car crash a few days ago, Mr Baker lost no time in stepping into the breach.

Meanwhile, lacking a minister with as much of an eye for the main chance as Mr Baker, DTI is fielding Messrs Channon, Lamont and Pattie in rotation for Cabinet meetings. Officials say this arrangement works adequately with each minister going to Cabinet when his own area of responsibility is up for discussion. Civil servants admit, however, that "it is not quite the same" as having the powerful Mr Tebbit, with a grip on all aspects of the department's affairs, going in to bat for them each week.

One unusual aspect of the DTI leadership is that the department has two fully fledged permanent secretaries. There has been considerable speculation as to how much uneasiness might be caused by such an arrangement. The official line is that Sir Brian Hayes and Sir Anthony Rawlinson each have their own spheres of influence within the department and that there are therefore no difficulties about having two civil service chiefs within a single organisation.

Mr Tebbit is thought to have an amicable relationship with both Sir Brian and Sir Anthony. He is said, however, to prefer the company of slightly younger officials who are more direct, less formal and altogether less mandarin-like than the two permanent secretaries, both of whom are in the traditional civil service mould. Mr Tebbit's own direct, no-nonsense approach is much valued by most of his officials.

DTI certainly seems to have had some success in tackling its major problem areas – big although the credit cannot go to Mr Tebbit alone. Over the last few years the department has had considerable success with the steel industry and BL; it has gone some way down the road towards coping with the difficulties of the shipbuilding and aerospace industries; it has just announced a new regional policy; it is floating British Telecom; and it is about to announce plans for deregulating the securities industry.

Perhaps it is because of these apparent successes that the department has excelled in furthering the Government's aim of reducing Civil Service numbers. The official numbers target for DTI is 12,800 in 1985 with a further 3 per cent cut – 380 jobs – by 1988. Yet DTI numbers have already been slimmed down to a mere 12,600.

The rationalisation or privatisation of large chunks of DTI's area of responsibility also raises the question of where Mr Tebbit will concentrate his energies when he returns some time in the new year. The betting is that his main interest is going to be competition policy and the further weeding out of anti-competitive practices.

GM forecast to overtake BL in car market

BY KENNETH GOODING, MOTOR INDUSTRY CORRESPONDENT

GENERAL MOTORS, the Vauxhall-Opel group, should overtake BL and take second place in the UK new-car market next year, according to the latest forecasts from the Economist Intelligence Unit's (EIU) motor business team.

It also maintains that although the prospects for Austin Rover, BL's volume car subsidiary, are far brighter than they were, "at least another three years of steady improvement are required before the company could be considered as a candidate for privatisation."

Austin Rover has a much more attractive model range, has greatly improved producitivity at its plants and in the co-operation with Honda of Japan has further potential to offset some of the scale disadvantages compared with the giants of the industry.

However, the company faces an uphill struggle in the UK to penetrate the medium-range fleet sector and in Europe to build up its reputation and sales, the EIU points out.

"The fact remains that Austin Rover is up against multinational competitors with far larger technical and financial resources and it remains an open question whether the company can make sufficient progress in sales to generate the funds needed for model replacement and new technology in time."

The EIU asserts that Austin Rover's export efforts remain disappointing and that the BL company will not gain the full benefit of its latest models – the Montego and the Rover 200 (made under licence from Honda) – until 1986, by which time the joint-venture car developed with Honda and code named XX *should also be in production.*

Big four shares of UK new car market (%)

	1979	1983	1985*
Ford	28.3	28.9	27.2
BL	19.6	18.6	17.5
GM (Vauxhall – Opel)	8.2	14.6	17.6
Peugeot-Citroën-Talbot	11.2	5.9	6.0

Source: EIU Motor Business *Forecast

At that stage, Austin Rover's output is scheduled to be moving towards 600,000 cars a year, compared with the nominal capacity of 750,000 at the Longbridge and Cowley plants.

The EIU predicts that BL's car market share next year will remain static at about 17.5 per cent while GM, with help from the new Astra, just voted European Car of the Year, should edge ahead with a 17.6 per cent penetration.

The forecasters expect total car sales in the UK next year to fall back by about 5.7 per cent from an estimated 1.75m in 1984 to 1.65m.

They also suggest that UK car production will remain below 1m at 945,000 next year compared with an estimated 965,000 for 1984.

Motor Business No 4/84; £65 a copy or £185 for four quarterly issues from the EIU, 40 Duke's St., London W1

Anglo-German tests on N-waste set to start

BY DAVID FISHLOCK, SCIENCE EDITOR

AN ANGLO-GERMAN trial of the treatment of radioactive waste by incineration is expected to start in West Germany this week.

The West Germans have developed an incinerator for burning radioactive materials. British nuclear researchers believe it could greatly reduce the volume of nuclear waste.

Incineration is expected to take on additional importance for Britain if, as is expected, the Government bans further dumping of radioactive wastes in the ocean.

The British Central Electricity Generating Board is providing material for a full-scale test on one type of waste it wants to get rid of.

The waste it provides will not be radioactive, however, to avoid any difficulties in transporting it to the West German national laboratory at Julich for incineration.

The CEGB's difficulty is at its Berkeley nuclear station, near Gloucester, which has accumulated many tons of scrap metal and graphite stripped from new nuclear fuel.

The volume of radioactive waste could be greatly reduced by burning the graphite to carbon dioxide, a gas that does not become radioactive.

The incinerator at Julich operates at 800–900 degrees Celsius and is designed to trap all traces of radioactivity in its filters and gas-treatment systems. It has been built by Kraftanlagen AG, a Heidelberg company, to Julich designs, and is designed to burn 70 kilograms of waste an hour.

Kraftanlagen is building a bigger version for Kraftwerk Union, the Siemens nuclear company, as part of the national radioactive waste management centre under construction at Karlstein, near Frankfurt.

Trade barriers warning

BY DAVID CHURCHILL, CONSUMER AFFAIRS CORRESPONDENT

A WARNING to the Government not to erect barriers to trade with Third World countries has come from Mr Peter Goldman, director of the Consumers' Association and president of the Bureau Européen des Unions de Consommateurs.

Mr Goldman, speaking at the end of an international conference on consumer policy, argued that "aid without trade lacks compassion and sense."

He added that "it is right that we do all we can to provide the maximum possible aid for developing countries at a time of crisis." He believed, however, that "it is wrong that we then bend world trade regulations in order to keep out the goods they produce and that they must sell in order to survive."

Mr Goldman particularly criticised the multi-fibre arrangement (MFA), whereby nine developed countries restrict imports of textiles and clothing from 28 developing countries.

"The MFA is a massive retreat into protectionism at the expense – in human terms – of some of the most deserving people in world trade," he said. "It is particularly hard on the smaller, poorer developing countries which have been late entrants to the international rag trade."

Mr Goldman also pointed out that protectionism was against the interests of the developed countries. "If we don't buy from developing countries, we can't sell to them either," he said.

"Indeed, there is evidence that restrictions on textile imports from low cost countries have led to direct retaliatory action against other UK exporters."

BASE LENDING RATES

A.B.N. Bank	9½%	■ Hill Samuel §	9½%
Allied Irish Bank	9½%	C. Hoare & Co. †	9½%
Armco Trust Ltd.	10½%	Johnson Matthey Bkrs.	9½%
Henry Ansbacher	9½%	Knowsley & Co. Ltd.	10½%
Armco Trust Ltd.	10½%	Lloyds Bank	9½%
Associates Cap. Corp.	10½%	Mallinhall Limited	10 %
Banco de Bilbao	9½%	Edward Manson & Co.	11 %
Bank Hapoalim	9½%	Meghraj and Sons Ltd.	9½%
BCCI	9½%	Midland Bank	9½%
Bank of Ireland	9½%	■ Morgan Grenfell	9½%
Bank of Cyprus	9½%	National Bk. of Kuwait	9½%
Bank of India	9½%	National Girobank	9½%
Bank of Scotland	9½%	National Westminster	9½%
Banque Belge Ltd.	9½%	Norwich Gen. Tst.	9½%
Barclays Bank	9½%	People's Tst. & Sv. Ltd.	10½%
Beneficial Trust Ltd.	10½%	R. Raphael & Sons	9½%
Brit. Bank of Mid. East	9½%	P. S. Refson	9½%
■ Brown Shipley	9½%	Royal Bk. of Scotland	9½%
CL Bank Nederland	9½%	Roxburghe Guarantee	10 %
Canada Perm'nt Trust	9½%	Royal Bk. of Scotland	9½%
Cayzer Ltd.	9½%	Royal Trust Co. Canada	9½%
Cedar Holdings	11 %	■ J Henry Schroder Wagg	9½%
■ Charterhouse Japhet	9½%	Standard Chartered ‖	9½%
Choulartons	11½%	Trade Dev. Bank	9½%
Citibank NA	9½%	TCB	9½%
Citibank Savings ¶	11½%	Trustee Savings Bank	9½%
Clydesdale Bank	9½%	United Bank of Kuwait	9½%
C. E. Coates & Co. Ltd.	10½%	United Mizrahi Bank	9½%
Comm. Bk. N. East	9½%	Westpac Banking Corp.	9½%
Consolidated Credits	9½%	Whiteaway Laidlaw	10½%
Co-operative Bank *	9½%	Williams & Glyn's	9½%
The Cyprus Popular Bk.	9½%	Wintrust Secs. Ltd.	9½%
Dunbar & Co. Ltd.	9½%	Yorkshire Bank	9½%
Duncan Lawrie	9½%		
E. T. Trust	11 %		
Exeter Trust Ltd.	10 %		
Exeter Trust Ltd.	10 %		
First Nat. Fin. Corp.	11 %		
First Nat. Secs. Ltd.	11 %		
■ Robert Fleming & Co.	9½%		
Robert Fraser & Ptns.	10 %		
Grindlays Bank ‡	9½%		
■ Guinness Mahon	9½%		
■ Hambros Bank	9½%		
Heritable & Gen. Trust	9½%		

■ Members of the Accepting Houses Committee.
* 7-day deposits 6.25%. 1 month 7.00%. Fixed rate 12 months £2,500 8.75% £10,000. 12 months 9.00%.
† 7-day deposits on sums of under £10,000 6¾%. £10,00 up to £50,000 7¼%, £50,000 and over 8%.
‡ Call deposits £1,000 and over 6¼%.
‖ 21-day deposits over £1,000 7¼%.
§ Demand deposits 6%.
¶ Mortgage base rate.

TECHNOLOGY

EDITED BY ALAN CANE

ENGINEERING INNOVATION

Sewer robot set for dark debut

BY ALAN CANE

SOME ENGINEERS are driven to design bridges, other internal combustion engines or motorways.

For Nick Ouroussoff, Steve Grosvenor and Tim Reeve, the all-consuming passion is straddle carriers, the huge £250,000 trucks used in docks to move containers to and from ships.

Existing models, they feel, are too expensive, too hard to maintain, go wrong too easily and steer badly. Yet they find it hard, as small engineering companies, to have their plans for a new generation of straddle carriers taken seriously.

"Every time I go to the Government to try to win a contract for a straddle carrier I come back with another nut machine job instead," Tim Reeve sighs ruefully.

The two companies, Ouroussoff Engineering and Grosvenor Reeve, share the same premises, the old power house at Kew Gardens in South London.

All three worked at one time for the same company, C. J. Lawrence, a firm of contract engineers which worked on, among other things, luxury motor cars.

Their interest in straddle carriers was born at this time as a result of a contract for Overseas Containers (OCL) which the company just failed to win. Now running their own businesses, they dream of straddle carriers while creating a huge array of innovative machinery to pay the bills.

"We make things that did not exist before," Nick Ouroussoff says.

The "nut machine," for example. Commissioned by a Turkish businessman and hazelnut tycoon, the machine must strip the outer layers from the nuts at the rate of 1 tonne an hour, leaving them white and marketable. It involves large volumes of caustic solution, tricky to handle at any time, but promises a massive payoff in cleaned nuts which are much less perishable than those cleaned by conventional baking.

It is being designed by Andrew Ritchie for Grosvenor Reeve; Ritchie is perhaps best known for his folding bicycle, (featured on this page on February 4, 1982).

Grosvenor, Reeve and Ouroussoff exemplify the old saying that an engineer can do for £1 what any damn fool can do for £2. They have just completed the first phase of trials of their "sewer robots," three foot-long contraptions of stainless steel which carry lights and their own television camera "eyes," designed to lay cable television lines in sewers.

The two companies have formed a third, "Troglotech," to market the robots. The original commission came from Cabletime, a cable television company established by the Water Research Council and UEI Group. Its idea was elegantly simple. Rather than creating a whole new network of conduits to house the cable television lines expected to be needed with the expansion of cable television, they could be laid in sewers.

The problem was carrying the work out economically. Money could only be saved by using sewer pipes running under city streets and without digging up and replacing the old pipework.

It was essential that the cables were attached to the top of the pipe and that they were waterproof and rat proof.

Troglotech came up with three robots, all built to the same general specification but with different functions.

All three models are pulled through the nine inch diameter sewer pipes using a pair of wines, one with elaborate electronic controls to enable the robot to be positioned exactly.

All carry lights and charged couple device television cameras to allow the operator visual control. The first robot drills a hole vertically upwards into the wall of the sewer pipe and inserts a plastic clip. The second robot forms the cable into the right pattern and fixes it into the clip. The third wraps a stainless steel mesh around the cable to protect it from mechanical damage and rats.

Cabletime reckoned that the robots would have to secure one fixing every one minute 15 seconds or so to be price competitive with men digging up the street. Troglotech reckons its robots can cut a minute off the specified time, making them look a very good deal indeed. Now the company is looking for new uses on oil rigs and other tubular structures.

At the other end of the spectrum, Grosvenor Reeve has developed a touch screen for a computer system which could, in quantity, cost about a quarter as much as the conventional infrared sensors used in touch screen computers manufactured by Hewlett Packard.

The principle is very simple and the company is understandably coy about revealing the details; suffice it to say that it involves a common electrical component costing only pence fitted to a fine glass screen mounted on the outside surface of the cathode ray tube. Pressure anywhere on the glass screen is detected by the components and converted into screen co-ordinates by a single chip microcomputer.

The system was originally devised for interactive video; Grosvenor Reeve see possibilities for its adoption for public computer systems — in travel agents, for example, where customers would be invited to put their finger, literally, on the holiday resort of their choice to see a video film of its attractions.

Grosvenor Reeve and Ouroussoff have yet to strike it rich (or build a straddle carrier) but they clearly enjoy their work. And they are sticklers for good engineering practice. As Nick Ouroussoff emphasises: "You can escalate the cost of a design by something like five times by going in without thinking about it first." Grosvenor Reeve is on 01-940 4910.

Hugh Routledge

Steve Grosvenor, Nick Ouroussoff and Tim Reeve with the Mark 1 sewer robot.

. . . and the dream; a straddle crane in action.

End of the line for dedicated w-p?

IT LOOKS like the end of the line for dedicated word processors as general purpose microcomputers increasingly muscle into their territory.

This is the chief conclusion of a new report from BIS/Pedder which looks at developments in electronic office systems.

The report argues that dedicated word processors—computer systems finely tuned to handle text rather than numbers and symbols—will probably not die away completely but will find a niche in the professional typing market.

It says: "Hard learned lessons on such peripheral topics as typing pool administration and document control, if incorporated into system software, will help to prolong active life."

The evidence for BIS Pedder's assertions are contained in the mas of statistics in the report. It shows that at the end of 1983, there were 82,971 workstations installed in the UK of which the lion's share (51.4 per cent) were screen-based, displaying part of a page and worth an average £6,223 a unit. By comparison, there were 269,669 electronic typewriters installed at an average value of £924 a unit.

This market will continue to grow at a greater rate than for any other word processing equipment category, the survey concludes.

But at least another 43,708 workstations were equipped with word processing software packages at an average cost of £376 a package. The report notes: "The single biggest threat to a continuing market for suppliers of dedicated word processing systems is the virtually universal availability of word processing software packages for every general purpose computer system right down to, and including, the smallest micro."

BIS Pedder says it is impossible accurately to measure the installed population of word processing packages for reasons including bundled software with business micros, multiple sourcing and unauthorised copying.

Nevertheless, the survey estimates that some 20,185 packages were shipped in 1983 with a value of £7.3m. Market leaders were Apple, Dataview Wordcraft and Microtrend.

Of the dedicated word processing systems shipped in 1983, British Olivetti led with 16.4 per cent with Wang in second place with 13.7 per cent a whisker ahead of IBM. The others included Wordplex, AES, Philips, ICL, Telecomputing, Data Logic and Prime.

A.C.

Office systems

Motorola on the Freeway

MOTOROLA IS making a major thrust into the factory and office information systems market by signing up VARs—value added resellers—in the UK, German, France, Sweden and Belgium.

Motorola calls the programme Freeway, and has already signed up Istel (formerly BL Information Systems), Circulas (the computer specialist subsidiary of Glynwed), Ukom Systems and AIS.

Motorola Information Systems plans that some 70 per cent of its business will in the future come from vertical markets addressed by VARs and according to marketing manager Noel Voice, Freeway has been devised "to ensure that successful and flexible partnerships can be developed."

In the first year Motorola expects to sell systems worth £3m to VARs, who will then tailor them and write specific software for their own customers. It plans to employ 20 of them by the end of next year.

Freeway agreements cover the company's Unix based products, the 2000 and 6000 series computers.

Motorola will retain its own direct sales force to sell to government and certain large buyers. Those same sales personnel will also service the VARs so that none of them find themselves in competition with Motorola. More on 0628 39121.

Inspection

Infra-red gauging

A gauging system that uses infra-red to transmit readings from the measuring head to a receiver has been developed by Multiswitch of Cheadle, Cheshire.

Designed for the in-process measurement of workpiece position, tolerances, errors due to thermal drift and tool wear checking, the measuring head consists of a combined probe and infra-red transmitter for three dimensional co-ordinate checking.

The probe body has a receptacle designed to fit a standard tool holder, enabling it to be stored in a tool magazine. For in-process inspection, the probe is simply loaded into the machine by command of the controlling NC computer. The system accuracy is 0.001mm. More on 061 437 1234.

THE ARTS

Royal Philharmonic/Festival Hall

David Murray

On Thursday Walter Weller conducted the Royal Philharmonic and then some: with the full complement of supernumerary players for Skryabin's *Poème de l'Extase* and Stravinsky's *Sacre du printemps*, the platform was formidably peopled. Walton's Cello Concerto, coming in between, seemed by comparison a shy chamber piece.

That was no fault of the soloist Paul Tortelier, who was properly eloquent with the work (despite some haphazard pitch in the scherzo), rising to a broad, thoughtful account of the finale. There was little bite or sting in the orchestral part, however—which blunted particularly the scherzo—nor any sign that Weller has definite ideas about the Concerto. It was decent and temperate, not more.

The Skryabin made much bigger waves of sound, of course, though one missed a strong current beneath them. Even a literal, careful reading of the *Poème* like this one will make you catch your breath once in a while, and it was by no means an insensitive performance. But half the secret of the score lies in knowing how to *reculer pour mieux sauter*: we heard only alternately loud and soft passages, without the cumulative pressure that can make the coda a thrilling explosion. The other half lies in having an inspired, searing solo trumpet and a seductive solo violin: here the one was plucky but short-breathed, and the other a model of grey decorum.

Le Sacre du printemps was vastly better. Most thoroughly prepared, and conducted with a strict regard for the internal proportions of the music, it made a powerful effect without any faking. If the erotic shivers of the Skryabin were not Weller's style, for Stravinsky he engineered some ravishing string-ensemble in Part 2, and paced the woodwinds' eerie private rituals exactly. Occasionally a pungent middle voice was almost swallowed up, but that is all but inevitable; most of what matters was incisively expounded. Few dramatic nuances were added, but the elemental stride of the music took care of itself very well.

Metanoia/Purcell Room

Andrew Clements

This group of variable size is based upon the trumpet of Jonathan Impett and the keyboards of Michael Blake, recruiting other instrumentalists as and when necessary. Its programmes tend to be constructed of sequences of shorter pieces, but generally have some kind of thematic thread — later concerts this season in the Purcell Room take Roberto Gerhard and Aldo Clementi as their starting points, and Thursday's programme was built around four miniatures by Ligeti — his three compositions for harpsichord, *Continuum*, *Passacaglia Ungherese* and *Hungarian Rock*, and the electronic study *Artikulation*.

The harpsichord pieces were rather dourly played by Blake, without any of the humour or sparkle that the two later pieces especially require. Dourness was unfortunately the prevailing mood of the evening, for Peter Maxwell Davies's Trumpet Sonata aside, it consisted of new or nearly new works, none of them at all distinguished. Over Lazlo Dubrovay's *Sequence* for trumpet and synthesiser (a British premiere) it's best to draw a polite veil, while Impett's *Tricycle* for trumpet, cello, piano electronics and tape, applied multi-layers of electronic treatment far too thickly for adequate comprehension.

Blake's *Taiwea* for trumpets, prepared piano and electronics at least kept its textures reasonably translucent, as it subjected a Zimbabwean song to more or less interesting reworkings. Michael Finnissy's *Dziel* was commissioned by Impett and Blake for the concert, and based like a number of his recent instrumental pieces on Kurdish folk music. It proved however to be of little consequence, spinning a quarter-tone inflected melodic line for the trumpet over tentative percussive sounds on the body of the piano and suggesting most of all a preliminary sketch more than a finished composition.

J. K. Parker/Elizabeth Hall

Dominic Gill

I did not hear Jon Kimura Parker's recital in the final rounds of this year's Leeds Piano Competition from which he emerged the first prize-winner, but I heard his performance there of Brahms's D minor piano concerto. It struck me then as an interpretation of undoubted seriousness and intelligence, delivered by a curiously sleepy and unengaging musical presence: well-made Brahms, eminently civilised, but unbuoyant, unlit, a shade stolid, academic. That final televised competition round is more circus than concert, and it seemed unfair to judge the whole artist by one under-rehearsed performance with orchestra: and subsequent South Bank solo recital, which goes with the first prize, was likely to be more revealing.

That was on Thursday, and although Mr Parker distinguished himself again as a serious and exceptionally capable pianist, there was nothing in his playing which signalled the arrival on the international scene of a truly remarkable artist. He began with Bach and ended with Barber; and in between took in two Ravel pieces, Chopin's fourth Ballade, and the virtuoso summit of Brahm's Handel Variations.

On present form, he is far too good a pianist to be dismissed, but not quite interesting enough to fire much enthusiasm. His account of Bach's G minor Toccata was accomplished, nicely articulated, but never for a moment gripping (I meant "sleepy" subjectively, not objectively). The notes of Chopin's last Ballade were summoned in an unusually clean and orderly fashion: the music in it remained obstinately earthbound.

If piano teachers were ever (or even necessarily) as accomplished executants as Mr Parker, I should call his manner "teacherly." It has at any rate a powerful sense of the confidently didactic — "observe me carefully: this is how it must be." But this, as he gave it, is precisely how Brahms's Handel Variations must never be: competent to a degree, almost every note in its place, but without a trace of originality or adventure, without driving current or dramatic urgency. I wish him well: but his music-making must suffer a sea-change indeed if he is to make any greater mark than the two previous first prizewinners at Leeds, Ian Hobson and Michel Dalberto.

Architecture

Colin Amery

Through lens and eye

The influence of painters and photographers on the history of architecture has never been thoroughly examined. The publication of modern architecture in periodicals and books depends largely on the skills of the photographer. How often has one seen the glamorous shot of a new reflective glass tower or a distorted perspective of a lofty commercial palace that bears little or no relation to the reality of the actual edifice?

I remember I was intensely disappointed the first time I saw Frank Lloyd Wright's Unity church in Chicago. It seemed so small and mean and dirty. I had in my mind's eye the pristine photographs of the architectural magazines and the carefully taken shots that appear in books by the architect himself. Sometimes the photographer seems to specialise in the mouse-eye view, presumably taken while lying in the grass, to emphasise the scale of the architecture. And then there are those tiresome props that constantly crop up in interior photography. The folded copies of the Financial Times on businessmen's desks, the eternal rubber plant, and the Alvar Aalto chair.

I once knew an architectural photographer who filled the boot of his car with what he considered to be well-designed furniture, which he would arrange to replace the more ordinary (and probably nicer) furniture placed in the house by the owner. There is an apocryphal story that a famous architect, when he was having his latest office creation photographed, felt that the office workers were just too ugly to be in the pictures. At great expense he imported professional models who arranged themselves so much more beautifully.

Townscape paintings and the architectural view are notoriously unreliable as actual records of the quality of places —so often the aim is to idealise the prospect. Canaletto, Pannini both fantasised about the Italian view and helped create our expectations of their country. Modern artists have been rather shy of architecture and their work, when it has had an architectural subject matter, too often relies upon photographic sources. A painter like Ben Johnson actually uses the colour transparencies of well known architectural photographers as the source material for his accurate and hard-edged view of recent modern architecture.

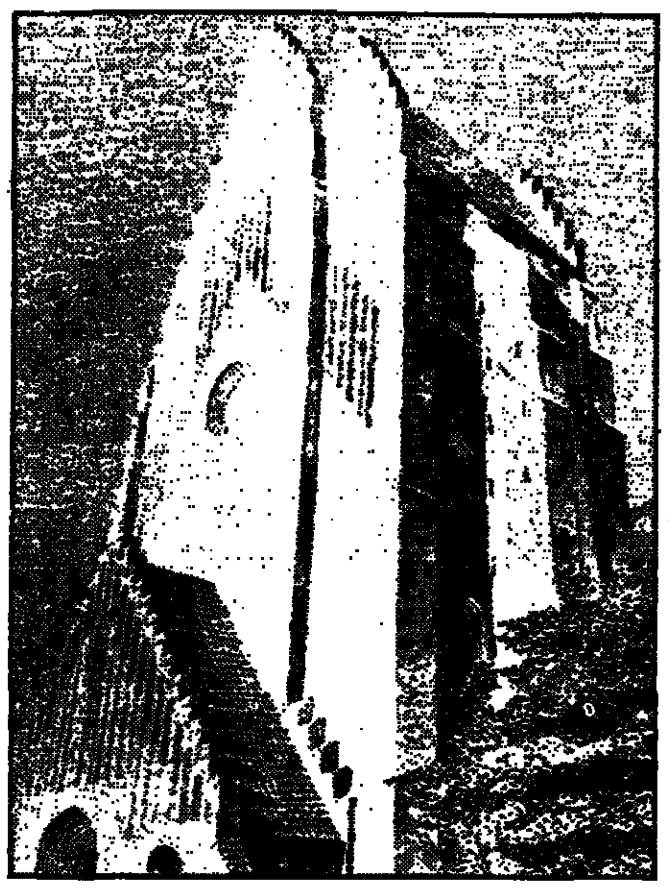
What is the quest that this exhibition claims to describe? It is the search for individual genius in architecture. What the show makes clear is that this search can be conducted with or without rules. Classical architecture achieves genius within a clear framework. More maverick and frenzied styles, like Art Nouveau, approach genius on their own terms. I have contributed a short essay to the catalogue of this exhibition and I feel that all I can do here is to commend a rare opportunity to see the work of an artist working in the architectural vineyard.

*

The subject of early photography is one that has always appealed to the architectural writer and historian, Gavin Stamp. In his latest book, *The Changing Metropolis, Earliest Photographs of London 1839-1879* (Viking, £14.95) he has selected early views that do tell the truth about London's growth. These are fascinating pictures. Their long exposures and sense of immediacy convey an uncanny power of accuracy. The book is therefore fascinating on two counts, as a slice of building history and as a display of technical virtuosity in the early world of photography.

An exhibition has recently opened in London at the Francis Kyle Gallery, Maddox Street, W.1., that the painter Glyn Boyd Harte has called *From Barcelona to the Baltic, An Architectural Quest*. It is his eighth one-man show, and the only one to be dedicated to one subject. The range is impressive, but the show can easily be divided into two parts: wonderfully clearly lit watercolours of the Neo-Classical masterpieces of Germany and Scandinavia of around 1825—and the transitional architectural achievements of the Arts and Crafts and Art Nouveau movements that were erected all over Europe from the 1880's to the 1920's.

There are a few buildings that do not fit these two categories and they are an interesting group in themselves: Alexander Thomson's Greek churches in Glasgow of the 1850's, Höger's Chile Haus in Hamburg and two Scandinavian works—The City Library in Stockholm (1921) and Thorvaldsen's Museum (1848) in Copenhagen. It is a surprise to find two watercolours of the latest example of the work of the British architect James Stirling, the Staatsgalerie in Stuttgart.



Grundtvig's Church in Copenhagen painted by Glyn Boyd Harte.

The period that the history of photography has determined for this book happens to coincide with the period of rapid growth in London. The impact of the railways, devastating in physical terms and crucial to the changing patterns of life, is seen here in stark black and white reality. The new constructions were enthusiastically recorded by the earliest photographers. I think Gavin Stamp is right when he says that the most haunting pictures are those which show the metropolis just before the transformation wrought by commerce, the railways and the Metropolitan Board of Works.

Photographers like, M de St. Croix, Henry Fox Talbot and Roger Fenton captured the short-lived harmony of a London that had developed naturally from Wren to Nash. There can be no doubt that London until the 1850s was a much more beautiful city than the one we see today. The skyline of the old City of London, when nothing challenged the steeples of Wren and the dome of his cathedral, was a work of art. The Victorians have a lot to answer for and this book provides the evidence.

In some of the photographs when there are hordes of dark figures engaged in construction —it is almost like looking at another world—you could be looking at Peking. Yet some of the more intimate views show a city that was rustic in character—muddy streets, ragged children and, everywhere, horses.

As an architectural record this book will become a classic. There are magnificent photographs of an unrestored Westminster Abbey, particularly one of the North transept before J.L. Pearson's "restoration" of 1884-92. Somerset House can be seen with its feet in the Thames—as it was meant to be seen. The full glory of Chambers's rusticated basement and its importance to the whole composition has been entirely vanquished by the Victoria Embankment. The newly constructed Embankment is well illustrate here too, with an interesting detailed photograph of the alternative designs for lamps. It seems that the choice of the dolphin lamps was the right one, we might have had putti and cornucopia.

This book represents a view of architecture that has survived almost by chance. To gather the evidence into one volume and illuminate it with carefully researched captions is a totally successful idea.

Rostropovich/Festival Hall

Max Loppert

On Saturday the English Chamber Orchestra invited one of its most celebrated long-time associates, Rostropovich, to preside over a concert containing a cello concerto in each of its halves. One always awaits from the great Russian fresh demonstrations of what David Cairns (in a memorable portrait) once defined as the essence of his art: a "combination of mastery and untamed power." And so Saturday's performances of Schumann and Boccherini were doubly disappointing: for in them the mastery seemed to be questionable, the power tamed—temporarily, anyhow.

In the opening movement of the Schumann concerto, the impression was notably cobwebby, as though — and here deductions might well have been entirely unrelated to facts — in the midst of a busy conducting career the instrument itself and the Schumann solo line had been no more than fleetingly considered (or, indeed, practised). Tuning was unreliable, the famous rhythmic freedom of style (which to a full-blooded Rostropovich performance can lend a bright flame of spontaneity) indicative rather of careless articulation.

Of past Rostropovich Schumann readings there remained, in the slow movement, a few fleeting, wonderful reminders, moments of soulful lyricism, the tempo drawn right back, the line pure and melting. There were a few similar moments in the Boccherini D major concerto, but the lack of really crisp, vigorous 18th-century delineation on all fronts made a proportionately more lumbering effect (in a work dependent for its charm on the twining of solo cello and *ripieno* violins in florid triplet thirds and sixths, the persistent failures of ensemble proved disheartening). The conductor, the young American Andrew Litton (Rostropovich's assistant in Washington), held things together as best he might; the opening item, a perfunctory read-through of the *Don Giovanni* Overture, did not show an admired young musician or the ECO itself at anything near their joint best.

Parker & Nowak/Barbican Hall

David Murray

Appearing with the London Symphony on Saturday were two young winners of recent competitions; the conductor Grzegorz Nowak, who has just won the Ernest Ansermet Award in Geneva, and the Leeds Piano laureate Jon Kimura Parker. Beyond polite cooperation there was no remarkable meeting of minds—neither with each other nor, in the D minor Piano Concerto of Brahms, with the composer. There were nevertheless some other good things.

One of those was not Mozart's *Così fan tutte* Overture, which Nowak took at great speed but quite smoothly, without a bubble of mischief or any *buffo* feeling. In the Brahms the difficult orchestral balance was handled competently, but again a sort of rarefied smoothness deprived the score of muscle and audible purpose.

The more substantial impression made by the pianist was still incomplete in the ways Dominic Gill remarked here about his performance in the Leeds finals ("eminently civilised but unbuoyant, unlit . . ."). Every passage was conceived in excellent taste, solidly sculpted and realised with fine technical resources: so far, so satisfying. For chord-balance—vital in Brahms—and for large-scale projection that never once included an ugly sound (invaluable in huge North American halls), Parker's gifts are plain. But he keeps his nose very close to the music of the moment; I suspect that Parker has just been too well and sedulously taught—an independent career will let him discover for us how vitally he can imagine a whole work. Nowak's foibles proved to be matters of personal sympathy only, for after the interval his Debussy and Ravel were stylish and luminous. *L'Après-midi d'un faune* was exquisitely poised (though it is rude to conduct the flute solo!), and the two *Daphnis* suites—granted an under-balanced motif or two—sounded idiomatic and brilliant.

Bringing it Home/Cockpit

Michael Coveney

This gloomily strident new play by the Irish writer Seamus Finnegan was commissioned by the Cockpit Youth Theatre, who perform it with a dispiriting intensity under Julia Pascal's direction. Rigorously schematic, on a cheap-looking expressionistic set of obtruding angular grey frames, the tale of two black soldiers returning home after a spell in Belfast is introduced by an angry girl prisoner in Armagh.

One soldier, Errol, has a brother Roy who has been arrested, for no reason, at a carnival. Roy is later beaten up in police custody. The other soldier, Mark, discovers that his mother has been arrested on a miners' picket line. His father talks angrily of the oppression of mining and other working class communities. Even Mr Finnegan, I am sure, will not claim any of his thoughts on violence in society to be either original or surprising.

What is particularly depressing here is that this team of writer and director has promised much in previous collaborations. But on this occasion the gift for chacterisation in vignette form has been trampled underfoot in a blaze of bad an dpuerile agitprop.

It is not a question of whether one thinks the author is right or wrong about police violence and the Northern Ireland policy of this government. But he is unprepared to earn his right to express opinion by setting up any coherent dramatic situation or even any glimmer of inflected, let alone complex, argument. He thus produces the worst of "engaged" or "committed" writing.

And when you hear one character, the miner, solemnly assert, unchallenged, that genocide has been going on in Great Britain for centuries, you begin to fear not so much for Mr Finnegan's intelligence as for his sanity.

Most of the young cast seemed more at ease when singing rather than acting. The music by Harriette Ashcroft is intermittently rousing; especially good in the carnival tableau.

Adrian Dunbar, not Gerard Horan, is playing Bill and the disconsolate wicket-keeper in *The Pope's Wedding* at the Royal Court. Apologies to both actors for this no-ball last Thursday.

Book Review

Arthur Jacobs

On perusing the opera-goer's Wisden

Opera on Record, 3. Edited by Alan Blyth. Hutchinson, £16. 375 pp

"Third and last," says the blurb; and "definitely the final volume," proclaims Alan Blyth in his editorial introduction. If a sigh of relief may be detected, a shout of congratulation is also in order. The publishers might have reinforced the achievement by cumulating the list of titles so that one knows in which volume to find which opera. The new volume retains the tried formula: a given opera, or sometimes a group of operas, receives a brief artistic appreciation as a prelude to an examination of complete recordings and recordings of individual numbers. Boito and Borodin, Ravel and Bartók are among the new names, but the net is also cast to bring up additional works by composers already sampled—Donizetti, Verdi and Puccini among them.

The editor even offers Verdi's Requiem—probably just as well, because no one is going to edit a *Requiems on Record*. Among all forms of music only opera arouses a fatal fascination with musty, scratchy performances of the past. The addict does not actually have to hear the performances; enough that he can read, like some cricket fan poring over volumes of Wisden, of the "more than 50" recordings of one tenor aria from Ambroise Thomas's *Mignon* which one contributor has survived listening to.

Redoubtable athletes of aural endurance, these contributors again include Lord Harewood, Harold Rosenthal, Edward Greenfield and Max Loppert. Ronald Crichton skilfully encompasses a large collection of Offenbach but is inexplicably deprived of the discography by Malcolm Walker that seals the other chapters.

So what is, as literary pundits might say, the sub-text? What is the real point of publishing what seem to be comparisons of incomparables, to which the contributors have been ludicrously encouraged to add their "ideal" casts, compounded from different recordings? The point is surely that lively discourse own memories and sensibilities about music jogs the listener's even when the subjects are elusive and the views unverifiable. Here are enthusiasts talking about what they love. David Murray on Bartók and Rodney Milnes on Weill show a special verve, and the others rarely fail to communicate, polite. To say of a singer that though sometimes they are too he suits a role "admirably up to a point" recalls a famous Waugh's *Scoop*.

John Steane should have been allowed to deal properly with "English opera in the 20th century": it is an editorial lapse that a chapter so entitled should end with Tippett and not even mention complete recordings of operas by Birtwistle, Williamson, Crosse, Harper . . . and Rutland Boughton. Elsewhere the word "contemporary" is more than once dangerously misused ("No contemporary tenor equals Martinelli"). But in general Mr Blyth's new assort ment will much please those who were hooked by the first volume five years ago—if they can stomach the hyper-inflation of the price. That first volume had nearly 300 pages more and cost £6 less; it had illustrations and this has none.

Arts Guide

Music/Monday. Opera and Ballet/Tuesday. Theatre/Wednesday. Exhibitions/Thursday. A selective guide to all the Arts appears each Friday.

Nov 30–Dec 6

Music

PARIS

Janet Baker, mezzosoprano, Geoffrey Parsons, piano: Schumann (Mon). TMP-Châtelet (2334444).

Ensemble Intercontemporain, concert Gary Bertini: Stravinsky, Dallapiccola, Rihm, Lutoslawsky (Mon). Théâtre de la Ville (2742277).

Quatuor Juilliard: Schumann, Irving Fine, Mozart (Tue 8.30pm) Théâtre des Champs Elysées (7234777).

Ensemble Orchestral de Paris conducted by Armin Jordan, Cecile Ousset, Piano: Beethoven, Mozart (Tue). Salle Pleyel (5630796).

Ensemble Orchestral de Paris – chamber music, Cecile Ousset, piano, Philip Bride, violin, Daniel Catalanotti, horn: Brahms (Wed). Salle Gaveau (5632030).

Orchestre de Paris conducted by Claude Bardon, Mstislav Rostropovitch, cello: Haydn, Shostakovitch, Florentz, Tchaikovsky (Wed, Thur). Salle Pleyel (5630796).

Quatuor Amadeus: Beethoven's String Quartets (Thur). Théâtre des Champs Elysées (7234777).

LONDON

Oslo Philharmonic Orchestra, Mariss Yansons conductor, Jens Harald Bratlie, piano: Berlioz, Grieg Piano Concerto, Shostakovich Symphony No. 5. Barbican Hall (Mon). (6388891).

London Philharmonic Orchestra, conductor Jesús López-Cobos, Florence Quivar, mezzosoprano: Wagner Brückner. Royal Festival Hall (Tue). (9283191).

The BBC Symphony Orchestra, Singers & Chorus conducted by Sir John Pritchard, with soloists Teresa Cahill, Alfreda Hodgson, Arthur Davies and Benjamin Luxon performing Delius's A Mass of Life. Royal Festival Hall (Wed). (9283191).

Royal Philharmonic Orchestra, conductor Tamas Vasary, Emanuel Ax, piano: all-Beethoven programme of Coriolan Overture, Emperor Piano Concerto and Symphony No 5. Barbican Hall (Thur). (6388891).

Philharmonic Orchestra, conductor Andrew Davis, Cho Liang-Lin, violin: Sibelius, Beethoven. Royal Festival Hall (Thur). (9283191).

A Victorian Evening with the English Chamber Orchestra, conducted by Carl Davis, with Robert Tear and Benjamin Luxon soloists. Queen Elizabeth Hall (Thur). (9283191).

Ronnie Scott's, Frith St: Trumpeter Dizzy Gillespie and his quartet are in residence this week.

NEW YORK

New York Philharmonic (Avery Fisher): Zubin Mehta conducting, Ivry Gitlis, violin: Carter, Ravel, Chausson, Saint Saëns (Tue); Zubin Mehta conducting, Christian Altenburger, violin, Carole Farley soprano; Schubert, Berg (Thur). Lincoln Center (7992595).

Carnegie Hall: Russell Sherman, piano recital: Beethoven, Liszt (Mon). (2477459).

Alice Tull Hall: American Composers Orchestra, Dennis Russell Davies conducting: Hanson, Roussakis, Hodkinson; Davidovsky: new work for cello & orchestra (world premiere). (Mon). (3621911).

WASHINGTON

National Symphony (Concert Hall): Günther Herbig conducting, Sergei Edelmann, piano: Beethoven, Brückner (Tue); Andrew Litton conducting. Weber, Schumann, R. Strauss, Respighi (Thur). Kennedy Center (2543776).

CHICAGO

Chicago Symphony (Orchestra Hall): Kurt Masur conducting, Annerose Schmidt, piano: Prokofiev, Matthus, Dvorak (Thur). (4358122).

VIENNA

Handel's Messiah, the Vienna Madrigal Choir conducted by Xaver Mayer. Musikverein, (Sun). (658190).

José Carreras sings Lieder with Ronald Schneider at the piano. Hahn, Fauré, Mascagni, Puccini. Konzerthaus (Mon). (721211).

Ivana Sladka, violin, Kumiko Ueda, piano: Tartini, Ysaye, Dvorak, Prokoviev, Franck. Bosendorfer Saal (Tues). (656851).

Vienna Symphony Orchestra conducted by Heinz Wallberg. Richard Strauss, Rot, Dvorak. Musikverein (Wed, Thur).

Slovakian Chamber Orchestra conducted by Bohdan Warchal. Vivaldi, Corelli, Handel, Janacek, Martinu. Kunstlerhaus (Thur).

ZURICH

Tonhalle: Tonhalle Orchestra, conductor H. Wakasugi, R. Buchbinder, piano: Wagner, Honegger, Brahms Piano Concerto No. 1 (Tue, Wed, Thur, Fri). (2011580).

NETHERLANDS

Amsterdam, Concertgebouw. Anton Kersjes conducting the Amsterdam Philharmonic, with Theo Olof, violin: Heppener, Van Delden, Ravel, de Falla (Tue, Thur). Yukiko Kamei, violin, and Frederic Meinders, piano: Beethoven, Bloch, Lazarov, Franck (Recital Hall, Tue). In the Recital Hall (Thur) The Juilliard Quartet with a programme of Schubert, Fine and Beethoven. (718345).

Rotterdam, De Doelen. The Rotterdam Philharmonic conducted by Edo de Waart, with Viktor Liberman, violin: Prokofiev, Mahler (Fifth Symphony). (Thur). (142911).

The Hague, Congresgebouw. The Netherlands Chamber Orchestra under David Zinman, with Rudolf Buchbinder, piano: Bolcom, Mozart and Schubert (Mon). (548000).

Amsterdam, Koepelzaal (Sonesta Hotel). Elisabeth Schwarzkopf will be holding public master classes twice daily from Saturday to Thursday (212223).

ITALY

Rome: Auditorium of via della Conciliazione: The Juilliard String Quartet: Schubert, Martino and Beethoven (Fri) and Georges Prêtre conducting the music from Roussel's 'Bacchus et Ariana' and Ravel's 'La Mere l'Oye' and Bolero (Sun, Mon, Tues). (65.41.044). Oratorio del Gonfalone: Vivolo della Scimia 1/b (Via Giulia): The 'cellist Luca Signorini and the harpsichordist Barbara Vignanelli playing Vivaldi and Handel (Thurs). (655.952).

Haitink/Festival Hall

Andrew Clements

Bernard Haitink's three-concert series with the London Philharmonic ended on Tuesday with two of the composers who began it last week — Elgar and Vaughan Williams. On this occasion, however, it was Elgar who supplied the string work and Vaughan Williams the symphonic structure. Between them conductor and orchestra gave a dapper account of Prokofiev's suite from *The Love for Three Oranges*, every rhythm crisp and instrumental detail precisely placed.

The weight of the concert though was to be found in the two English works, both once again I suspect, new to the conductor. Haitink's way with Elgar is now well established and marvellously effective: paragraphs are taken in broad sweeps with climaxes fiercely articulated. The Introduction and Allegro for strings responded well to such treatment. The Introduction was very measured, each element savoured and lovingly shaped; the Allegro, when it began, was only gradually allowed to build up power and speed, so that the launch of the fugue became a true emotional release, an intelligent shaping of the whole edifice toward its natural peak.

Vaughan Williams' *Sinfonia Antarctica* presents problems of credibility and coherence. Undoubtedly it contains some of its composer's most imaginative orchestral writing — the use of tuned percussion creates a striking sound world and there are few works in which a wind machine seems less out of place. Yet it is difficult to forget that the score began as the incidental music to a film. However carefully Vaughan Williams shaped the movements into a symphonic whole, it remained essentially a programmatic work. But it is no more illustrative than some of the symphonies by Shostakovich, and Haitink's account, splendidly played by the LPO with the wordless voices of Sheila Armstrong and the ladies of the LPO Chorus, reminded one of his Shostakovich performances — grimly sustained, with biting wind interjections and uncompromising fortissimos. It certainly left a most positive impression, and whether or not that was a symphonic one scarcely mattered at all.

Orphee/Upstream

Martin Hoyle

The little Upstream in Waterloo is often the scene of interesting revivals, exhumations and novelties. In the footsteps of the enterprising Cherub company come Floorboards Theatre Productions who earlier this year gave us a taste of inter-war continental drama, including a powerful dose of German expressionism. With all good will, I cannot feel any enthusiasm for this version of Cocteau's *Orphée* in all its dated preciosity, however chic its shallow artiness may have seemed to cinema-goers recovering from post-war austerity.

This Orpheus is obsessed with his art. He has reached the point where he sees poetry in the messages stamped out by his horse, like "hello." His disgruntled wife yearns for old companions among the Dionysiac moon-worshippers, one of whom engineers her death with surgically masked assistants wielding a radio set and a bobbin. The glazier who calls to mend the pane that Eurydice smashes every day in her loneliness turns out to be the couple's guardian angel. After death (twice in her case, of course), a visit to the underworld and interrogation by funny policemen, the three sit down to lunch, like Buñuel's discreetly charming bourgeoisie and give thanks for the exclusive and somehow special status of the artist.

This kitschy tosh of a sort no longer, mercifully, written is not helped by a wildly inconsistent and unstylish translation and some very patchy acting. The quiveringly intense high camp evinced by some Cocteau interpreters on screen — Maria Casares, for instance — is hard to bring off. As a baleful anti-life force the Angel of Death, with her rubber gloves and dominatrix manner, fails when such portentous sentiments as "he laughs last laughs longest" are attributed to her. "That makes my blood run cold," says Eurydice who evidently hates clichés as much as I do. We both had a bad evening.

Wexford Opera 1985

Next year's Wexford International Opera Festival, the 34th, will run from October 23 to November 3. The repertoire will be Alfredo Catalani's *La Wally*, G. F. Handel's *Ariodante* and Kurt Weill's *The Rise and Fall of the City of Mahagonny*.

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Monday December 3 1984

Gatt's future at stake

THE Gatt is both a set of trading rules and a world forum for negotiating and defending them. Its success—and survival—ultimately depend on confidence and consensus. But in the past week we have witnessed something close to a crisis of confidence in the open trading system and the appearance of some dangerous cracks in the institutional consensus.

The United States must accept a large part of the blame for this. Its contradictory behaviour and aggressive diplomacy have not only aroused the EEC, but seriously antagonised the developing countries, which comprise two-thirds of the Gatt's 90 member nations. There is now a distinct and apparently cohesive Third World lobby in the Gatt, led by India and Brazil. If the traditionally pragmatic Gatt becomes, like Unctad, a North-South shouting shop more concerned with ideology than with commercial relations, then the prospects for a successful new round of talks on trade liberalisation will be bleak indeed.

Last week President Reagan decided to block imports of European steel pipes and tubes, an act denounced by the EEC Commissioner, Viscount Davignon, as "the closing of the American border." The failure of both sides to agree a voluntary arrangement—itself a derogation from Gatt principles—may not be wholly the Americans' fault. But the incident is further depressing evidence of the gap between free-trade rhetoric and political action. A long EEC-U.S. wrangle about compensation, as happened in the case of special steels, is about to begin.

Inconsistency

Even as it was closing its doors to foreign steel, the U.S. Administration was preaching in Geneva the virtues of free trade in services, and strong-arming a reluctant Third World in order to get the question put formally on the Gatt agenda.

The inconsistency of the U.S. position must been painfully apparent during the seven days of closed-door negotiations that over-shadowed the Gatt annual meeting. In this procedural struggle the U.S. found itself isolated even from countries like the UK and Japan which are equally keen to see trade in services brought eventually into the Gatt disciplines.

The U.S. is right to press the services issue, and not just because industries like finance, transport, telecommunications and tourism now employ a majority of workers in many industrialised countries. It is right to see the Gatt as the proper forum for studying and negotiating this complex question, and the U.S. is justifiably impatient with the short-sighted refusal of some developing—and developed—countries to treat the issue seriously.

At the very least, the U.S. succeeded in forcing the rest of the world to focus on barriers to trade in invisibles. There is no guarantee that negotiations will follow: indeed, the U.S. itself knows no more than anyone else how such negotiation might be approached. A compromise on procedure was eventually reached, but a high price has been paid in terms of goodwill lost.

Framework

Even more worrying is the U.S. threat to bypass the Gatt altogether if progress continues to be too slow for its liking. Talk of "plurilateral" and bilateral trade deals between the U.S. and her trading partners has further weakened other nations' confidence in the system. Unless the world can be reassured that the U.S. is fundamentally committed to the Gatt, the new round that the U.S. is demanding will be blighted from the outset.

The elements of a new negotiation are, nevertheless, falling slowly into place. The framework for an attack on distortions to agricultural trade has remarkably, been agreed; the controversy over services has been temporarily defused; and some progress has been made on the methodology for dismantling quota restrictions and other non-tariff barriers. More work needs to be done on textiles and clothing: here the manifest failure of the Multifibre Arrangement either to manage poorer nations' market access or to protect jobs in richer ones suggests the time has come to consider a trade-off with the Third World.

The hawks in the U.S. Commerce Department and in the Congress should accept that the Gatt secretariat is doing its level best to find enough common ground to justify a political decision—which could come next year—to launch a multilateral negotiation. The Gatt cannot be allowed to degenerate into a cockpit in which the U.S. is pitted against a Third World lobby. It is time some of last week's bystanders like the EEC and Japan—however shady their own protectionist past—stepped firmly into the ring.

The right to know

SOMETIME soonish the British Government is going to have to do something, or at least say something, about Freedom of Information. The phrase is a catch-all, sometimes written with capital letters, sometimes not. What it means, in practice, is greater access for the public to information that is officially held or, to put the case more subtly, greater discretion on the part of public servants to disclose what information they have.

The present system does not work. There is an Official Secrets Act, drawn up hastily in 1911. Section Two of which makes it an offence for any person holding office under Her Majesty to communicate without authority to any person any information which has been obtained because of their official position—and for any person to receive such information.

It has been widely agreed for decades that at least that section of the Act needs to be reformed: see, for example, the Fulton Report on the Civil Service which came down against unnecessary government secrecy in the 1960s, or the more narrowly based report of the Franks Committee in 1972 which recommended that Section Two should be repealed and replaced by a new Official Information Act with more specific provisions.

Blunderbuss

Indeed, the only credible intellectual defence of the 1911 Act in recent years has been that it is so absurd, and such a blunderbuss, that no civilised government would deign to use it. We now know that that view is not tenable. Mrs Thatcher's Government may be civilised, even liberal, in many ways, but it is not above resorting to any old Act, however discredited, on the Statute Book, if it wants to enforce a point.

The particular case concerns a senior civil servant at the Ministry of Defence who disclosed some information about the sinking of the Belgrano during the Falklands War. But the details do not matter. The principles do. They are that under present legislation the Civil Service is not allowed to provide information and that the public has no right to know—a regime which, if you think about it for a moment, is manifestly ridiculous in a parliamentary democracy, or in a democracy of any kind.

The only question is not whether there should be reform, but how it should be arranged.

Previously we have argued that legislation about greater public access to information is not necessarily the best way forward, or at least not an essential first step. The Government could simply give a signal by taking a more relaxed attitude to the way in which information is disseminated. Legislative change could come later. This gradualist approach was discussed, and respected, by Lord Scarman in his Granada Guildhall lecture last week, though in the end he rejected it.

Contradiction

Lord Scarman made several telling points. For example, the 1911 Act is way out of line with—indeed contradicts—much of contemporary legislation, Section 10 of the Contempt of Court Act 1981 seems designed to give a measure of protection to those civil servants who provide information and to those who receive it, even if the courts have not yet fully interpreted it in that way. That is wholly at odds with the Act of 1911.

Lord Scarman concluded that the present confusion and lack of consistent principle render the law "obscure, difficult and on occasions seemingly arbitrary." He wants the right to know to be formally set out in legislation. For that, it may be a little premature. One of the faults of the 1911 Act was that it was produced in a hurry but the prevailing system is haphazard, undemocratic and not conducive to good administration. The Government ought to have something to say about reform in a green or white paper pretty soon.

ECONOMIC VIEWPOINT

An alternative to the dole

By Samuel Brittan

MOST SUGGESTED quick ways of providing jobs are specious and superficial, because they suggest that an entity called government can bring jobs into existence by playing with numbers and pieces of paper without any costs or sacrifice on anyone's part.

There is, however, one suggestion on this front which cannot be turned down so easily. This is based on the fact that the average person out of work involves a public expenditure cost of £1,950 per annum according to a written parliamentary answer given by Mr Peter Rees, Chief Secretary to the Treasury, on July 10. The estimate covers unemployment pay, supplementary benefits and housing benefits plus an allowance for administrative costs.

The argument, which has some validity, runs as follows: Would it not be better to pay this sum to people for doing something rather than nothing—assuming, that is, that they do not already work in the "black economy?"

There are innumerable tasks which remain undone, because we cannot afford to pay for them. At least as important—and far more labour-intensive—than the sewers and roads which the infrastructure lobby calls for are service activities ranging from home helps, ancillary services in hospitals, the clearing and maintenance of parks and streets, services for old people and thousands of others. Would not everyone out of a job for, say, over six months, be better off with the option of doing such work at pay equivalent to, say, 10 per cent above the normal dole?

How much would a dole-plus scheme cost? Let us round up to £2,000. the official estimates of the benefit cost per unemployed person; and take jobs at dole-plus to mean another 10 per cent. Add another 30 per cent for supervision, materials, and so on. We then arrive at 40 per cent of £2,000, ie £800 per person per year. Let us round it up further to £1,000 to take into account travel-to-work expenses and any other cost elements overlooked.

An ideal target for the scheme might be in the region of 1m workers, but it would be unrealistic to expect take-up to amount to more than 500,000, at least initially. This gives a net Exchequer cost of £500m. This is less than two-fifths of 1 per cent of public expenditure and an eighth of the average error in forecasting the PSBR at Budget time.

The Institute for Fiscal Studies has kindly made available to me some rough estimates of the implications of offering everyone unemployed for over six months or a year a basic £34 per week to work in special projects. This sum is based on topping up the benefit rates prevailing in 1983-84 (year starting in November).

Existing social security payments would supplement the £34 basic pay. People at that income level would normally have their housing costs met. The typical single person—a category which makes up over half the unemployed—would be £7 a week better off than on the dole or supplementary benefit.

The more serious problem is with the childless couple with a dependent wife. Such a couple could be nearly £10 worse off on special work, simply because Family Income Supplement is not payable to childless couples. The cost of extending FIS to such couples would only be about £200m per annum.

People active in the employment opportunities field will be quick to point out that there is already a Community Programme, administered by the Manpower Services Commission. Sir Geoffrey Howe made available in 1982 increased funds for the programme to finance 100,000 new places. Including people absorbed from earlier programmes the target is 130,000 places, of which 126,000 had been filled by October 1984.

Projects under the Community Programme are not directly organised by the MSC, but prepared for the latter's approval by local authorities and voluntary organisations, and sometimes by a very indirect route, private sector employers. Projects have to meet the following criteria among others.

- They must "benefit the community" and also make a contribution to long-term prospects of participants.
- The bulk of places must go to young people under 24 unemployed for more than six months, or older people unemployed for more than a year.
- Maximum reimbursement is £63 per week per filled place for up to a year.
- Existing business or jobs must not be put at risk ("no displacement").
- The appropriate local union rate for the job must be paid. This is reconciled with the £63 limit by mixing part-time with full-time workers.

This last feature, which is very different from the principle suggested at the beginning of this article, is inevitable given the tripartite nature of the MSC on which government, union and employers are all represented; and the net cost per job is about twice the estimate I suggested. Even so the Community Programme is much the most effective of official job programmes. The net cost (after taking into account benefit saved and some tax receipts) is about 30 per cent of the gross of £600m per annum.

Looking ahead, there are three possibilities. One is to expand the existing Community Programme—some of those involved believe that a good 500,000 places could be provided with more funds and more publicity. A second possibility would be to modify the programme. It would be difficult to get rid of the "rate for the job" under a tripartite structure, but the "no displacement rule" might be interpreted a little more flexibly and more scope might be allowed to private enterprise projects.

Thirdly, a separate agency could be set up by the state of a New Deal type, which would work on strict dole-plus lines. (This would not preclude more funds for the Community Programme). The idea of two different work opportunity programmes is anathema to the administrative mind; but there is virtue in competition in work opportunities, as in anything else.

The main obstacle to an expansion in any of these three directions is not just or mainly finance, but the argument that the places provided "are not real jobs."

This needs to be discussed thoroughly. For as so often with Thatcherite arguments, a valid and an invalid objection are run together. There is a valid sense in which jobs preserved by government subsidy in, eg the motor industry, mining, shipbuilding or (let us never forget) agriculture, are "not real jobs." Most of these jobs pay at least the average industrial wage and there are usually heavy extra costs in overheads, materials, components, and so on.

The waste in maintaining these subsidies is not merely the Exchequer cost, which may or may not be more than the dole saved initially. The real waste is that people are tied up in high-cost or declining industries. Even in the present period of high unemployment some 3m or 4m adults find new jobs each year. The effect of subsidising lame ducks is undoubtedly to divert manpower and other resources from more to less valuable activities.

By contrast, people working on dole-plus schemes are clearly earning less than normal wages and will have an incentive to move to "real jobs"—i.e. commercially profitable ones—as soon as they become available.

In the example I gave earlier on where the net cost to the Exchequer of a dole-plus job is £800 to £1,000. the nation benefits provided the work done is worth this modest amount. An unaided private employer by contrast, who does not benefit from reduced dole payments, will only take on fringe workers if their efforts are worth £2,800 to £3,000 per annum—and even then it is unlikely that union pressures and the prevailing industrial relations culture will allow him to pay as little as dole-plus.

There is a further reason why dole-plus schemes have a greater ratio of benefit to cost than most make-work programmes. This is that the inflationary impact is likely to be least when the increased demand for labour is injected for low pay jobs outside the union-negotiated sector. The tightening of the labour market will occur in that sector where there is the greatest surplus of supply of labour over demand.

Indeed, there is a third more far reaching aspect. Suppose special labour schemes are not confined to optional extras such as brightening up hospitals or improving the environment. Suppose that the schemes become competitive with work already carried out by local government employees, health service workers, or for that matter private sector contracting labour. Then union labour would be undercut and the Government would at last have a wedge to insert into the rigid wage structure which it rightly, if unsubtly, maintains is responsible for unemployment in the first instance.

How far to go along that route would depend on the balance struck between discretion and valour. Before deciding, it is worth asking: why do private entrepreneurs not take on the unemployed at slightly above the dole? Or why do the unemployed not organise themselves into co-operatives and price themselves into work? The fundamental answers lie in the union-dominated, rate-for-the-job culture of the labour market. It would be a brave entrepreneur or co-operative who incurred the odium, if not the physical abuse, of providing "scab" labour at a third of the union wage. Specially established state agencies might be able to take a stronger line.

A wedge is not a battering ram; and any effect of dole-plus work in shaking up the wage structure must be long-term and indirect. Moreover, I know that in mentioning this aspect I risk alienating not only the Low Pay Unit, but many middle-of-the-road enthusiasts for community work.

So be it. But as in so many other contexts, I can only beg those who really have the welfare of the poor at heart not to waste their energies trying to prove that demand curves do not slope downwards, and that water runs uphill. Instead they would do better to devote their efforts to analysing and advocating those changes in the structure of property ownership and in taxes and benefits which would make lower and more flexible wages compatible with a tolerable distribution of income and wealth.

Meanwhile, one must remind the present Government that however counterproductive are many of the Heathite remedies proposed for unemployment, the combination of unsatisfied needs and unused human labour is a logical and economic, as well as a social scandal. The Public Expenditure Review was a lost opportunity to expand Community Programmes at the expense of worthless interest group programmes. The question needs to be reopened well before the next Review.

Jobs, pay, unions and the ownership of capital — *A booklet containing reprints of Samuel Brittan's recent articles on these subjects is now available from Nicola Banham, Publicity Department, Financial Times, Bracken House, Cannon Street London EC4, price £1.50, including postage.*

A training scheme in Dover, Kent.

SOME COMMUNITY PROJECTS

- IMPROVING THE ENVIRONMENT
  Clearing canals and constructing footpaths.
  Making cycle tracks from disused railway lines.
  Reclaiming disused land for public use in inner city areas.
  Clearing and fencing off derelict areas.
  Conserving the coastline.
- ENERGY CONSERVATION
  Insulating lofts for elderly people.
  Advising people on the cost-effective use of energy.
  Roof insulation and draught-proofing of publicly-owned dwellings.
- PROVIDING SOCIAL AMENITIES
  Providing playgrounds in inner city areas.
  Providing creche facilities for one-parent families.
  Improving sports amenities for public use.
  Converting warehouses into community centres.
  Constructing adventure playgrounds.
  Improving buildings and land for camping sites.
  Creating picnic areas and nature trails.
  Providing new allotments.
- HELPING LOCAL PEOPLE
  Gardening work for physically handicapped people.
  Producing a directory of amenities for disabled people.
  Running lunch clubs for elderly people.
  Advising elderly people on how to avoid hypothermia.
  Interior decorating service for elderly/disabled people.
  Renovating clothing and furniture for use by social services.

UNEMPLOYMENT IN BRITAIN

BY DURATION Oct. 1984 (millions)

Total	3.225
Over 26 weeks	1.823
Over 52 weeks	1.277
Over 26 weeks (aged under 25)	0.561
Over 52 weeks (aged under 25)	0.366

BY HOUSEHOLD TYPE (%)

Single		56
Couples,	0 children	18
"	1 child	8
"	2 children	10
"	3 children	4
"	4 children or more	4

Based on General Household Survey 1982 report.

Men and Matters

Beanstick men of Hong Kong

For all the controversy over the assessment office set up in Hong Kong by the British government to report on local reaction to the Sino-British agreement on the colony's future, its newly-published report gives a rare and colourful insight into the kaleidoscope of minds that make up the Hong Kong scene.

Take Yung Tak, chairman of the Tai Chung Hau village mutual aid committee. He wrote in one of the 2,494 documents submitted to the assessment office "It is in autumn when the weather is fine, with chrysanthemums blossoming and the refreshing zephyr blowing, that China and Britain initial the agreement on the question of Hong Kong's future."

In case anyone was uncertain about his community's views on the Sino-British agreement he adds, "Hong Kong people rejoice to hear the encouraging tidings of the joint declaration that their Utopia will be preserved."

"Apparently if you have two children at university you'll get a reduction on the new dog licence"

But not everyone shares Yung Tak's views, or his lyrical style. Not least among the opposition is the New Territories Poems and Songs club which says in simple prose that it has been "extremely disappointed" by the agreement.

The Hong Kong Kowloon Cane-Woven Ware workers' union has accused Britain of an "under the table deal" with China that was "an heinous crime of enslaving and persecuting the free people of the colony." The union goes on to warn of a communist Chinese regime that "hoaxes the people with honeyed words and heartening promises but with a murderous heart."

The Hair Dressing and Make-Up Trade Workers union promises, meanwhile, "to stand close to the Hong Kong citizens to take part in community affairs and contribute to the stability and prosperity of the colony."

The Dried Beanstick Trade Workers' union is nothing like so coy. It says Britain is betraying the Hong Kong people by initialling the agreement "with an obsequious and compromising attitude" and asks "Where have the national dignity and prestige of the British government gone to. . . ."

Science rules

Mrs Thatcher has always taken with the utmost seriousness the fact that she is the first British Prime Minister with a science degree. Not only is she a Fellow of the Royal Society, but she has also, during her premiership, appointed herself minister with overall responsibility for science policy in addition to her other burdens.

On Friday she and her education secretary, Sir Keith Joseph, will appear at a private seminar at All Souls College, Oxford, one of a series, to discuss political choices for the future in relation to science and government.

The main organiser is Robert Jackson, MP for Wantage, and previously the Euro MP for Upper Thames. He thought up the All Souls lecture series partly as a matter for self-education.

The lectures have also clearly filled a gap as there have been no refusals from the scientists and administrators invited.

Sir Keith and Mrs Thatcher may expect a more genial reception than they would get in other parts of the education world in view of their decision to increase public spending on science at the cost of cutting support for student grants — which is, of course, another story.

Keeping up

United Airlines is making a special contribution to added congestion at U.S. airports in this busy pre-Christmas period.

Crumpled characters can be seen getting out of aircraft at unearthly hours to swallow a quick coffee in the airport buffet before jetting out again.

United is promising a free one-year first-class travel pass on all its routes to anyone who can fly to all 50 states in 50 days using its services. The offer is to mark an expansion of the airline's routes to all states.

Alfred Elliott, aged 40, a Chicago lawyer, spent just 4 minutes in Anchorage, Alaska, the other day before continuing his marathon trip. He is already confident he will win a pass—which he believes will be worth about $50,000 to him for his business and pleasure flying next year.

Elliott makes a hobby of airline flying. His idea of a quiet weekend is to hop on an airliner at O'Hare and make a return trip to London or Paris. Armed with a copy of the United timetable he has already flown to 38 states for the United competition, and he believes he will beat the deadline of December 16 by at least a week.

Elliott expects to spend $7,500 of his own money on air fares, taxis, and hotel rooms. Many other competitors are being sponsored by as much as $16,000.

Is it fun to cover the U.S. in 50 days? "No," says Elliott, "It's gruelling, tiring, and boring. Moreover my back has taken the shape of an airline seat."

Oxford dollars

David Young, the lively American founder of Oxford Analytica, an Oxford-based research and consulting group, ought to qualify for a government grant for providing occasionally underemployed academics with work.

He has just launched a daily briefing service of up to five news analyses transmitted via the Telerate system on a subscriber basis. In doing so he is providing part-time work for a dozen dons associated with the venture.

Young trained as a lawyer, worked as an aide to Henry Kissinger in the U.S. National Security Council, and then moved on to a White House liaison job.

He set up Oxford Analytica in 1975. In providing lucrative freelance work for a large number of dons—few of whom seem to have any professional qualms about potential conflicts of interest—he has become a popular figure in most senior common rooms among the dreaming spires.

The dons are at pains to emphasise that their students always come first—although it is not unknown for tutorials to be postponed to make way for an Oxford Analytica deadline.

As if to underline that claim, after a recent lunch to tell the wider world about the service, virtually all the dons left promptly at 2 pm—foregoing the cheese and port—to attend tutorials, or so they said.

Observer

Foreign Affairs: the EEC

The only way out of the impasse

By Ian Davidson

IT WILL BE with sinking hearts that the European Community heads of state and of government gather for their winter summit meeting in Dublin today. They were scheduled to be talking about the future; they will find that they are obliged to discuss, yet again, the legacy of the past; they were supposed to be giving a new political impetus to the construction of Europe; in practice, they will be forced to haggle once again about—you guessed it—the common agricultural policy. It is enough to make one despair.

At their last summit, at Fontainebleau before the summer holidays, the interlocking quarrels over Britain's excessive contributions to the European budget and about its future financing were essentially wrapped up. All that remained of the dog-eared agenda of the previous seven years was to finish off the membership negotiations with Spain and Portugal. Thus, the decks were to have been cleared for the Community to make a new start in life, and in particular for the member states to tackle the political and procedural paralysis which for so long has made it virtually impossible for the Community institutions to take reasonable policy decisions with reasonable despatch. To this end, the summit set up a special committee, known as the Dooge Committee after its Irish chairman, whose proposals for the revitalisation of the Community were to have been the centrepiece of the Dublin summit.

It was not to be. As if to underline the defects of the Community's decision-making processes, not merely did the 10 foreign ministers fail to conclude negotiations with Spain and Portugal, they even failed to agree among themselves on the terms to offer those countries. So, unless Dr Garret FitzGerald, the Irish Prime Minister and current president of the Community, has had some miraculous success in his last-minute pilgrimmage round the capitals of Europe, he and his colleagues will have to spend their valuable time squabbling over the competing claims of French, Italian and even German wine, and the demands of the Greek and Italian olive oil producers.

This is a pity, because it means that they will have much less time to discuss the real future of the Community, and it turns out that the Dooge report is a much more interesting document than seemed at all likely when the committee was set up three months ago.

What gives it particular interest, is that it begins to represent a clear line-up between those member states which profess to be determined to break out of the paralysis and stagnation of the past decade, and to move decisively towards a more integrated Community, and those which are reluctant to make any such move. In the first camp are all six original members of the Community (France, Germany, Italy and the Benelux); in the second are Greece and Denmark; and somewhat uneasily in the middle stand Britain and Ireland.

Curiously, the objections of the foot-draggers are not directed primarily at the substantive policy targets set out in the report. To be sure, the so-called "footnote countries" (after the regularity with which they object to any political innovation in the Community) express all the expected reservations about the strengthening of foreign policy co-ordination, especially on questions of security and defence; and Britain's Mr Malcolm Rifkind dutifully records the Treasury's objections to the idea of a European central bank and a common European currency. But in most other respects, the economic proposals get by with hardly a single footnote: complete freedom for the internal market, a common market for insurance, harmonisation of taxes, free movement of capital, co-ordination of economic policies, the strengthening of the European Monetary System. (Even Mr Rifkind does not, apparently, object to the proposition that all member states should participate in the EMS; when the time is ripe, perhaps?)

By contrast, footnotes abound when we get to the parts which describe how we get there from here. This is the nub of the problem. After all, the Community has for years declared its devotion to all kinds of grandiose objectives—economic and monetary union, European Union, you name it. But in practice progress has been negligible because it has been held back, through the operation of the veto principle, to the speed of the most reluctant member state.

The solution, according to seven members of the committee, is to move to majority voting in the Council of Ministers, not merely on all issues where it is permitted under the Treaty of Rome, but also (for the first time) on decisions which would require the harmonisation of national laws. This meets firm objections from Greece and Denmark, as well as qualified reservations from Mr Rifkind, who is only prepared to concede that there should be *some* (unspecified) increase in majority voting.

In theory, a coalition of the seven could on specific issues muster enough votes between them to secure the weighted majority required under the treaty. But it stands to reason that majority voting cannot work satisfactorily as a general rule of decision-making in the Community unless all the member states accept the legitimacy of the procedure; and it cannot work at all unless almost all of them accept its legitimacy.

But it is important to put majority voting in the right perspective. When the authors of the Rome Treaty framed this principle, it was not because they wished or expected individual member governments to be regularly outvoted by hostile coalitions, and thus placed in domestic difficulties at home, but because they believed that the *availability* of majority voting would act as a permanent incentive for compromise in a process of bargaining from which all member states would, on balance and over time, gain net benefits. Conversely, the reluctance to take votes simply encourages ministers to stick indefinitely to wholly unreasonable positions, as we have seen so often during the past 19 years.

Thus far, one can only see deadlock. The problem for the integrationists is to put pressure on the minimalists; if they can induce the British, at least, to be a bit more wholehearted about the Community, the odds against the footnote countries lengthen immeasurably. To this end, they propose that, in exceptional circumstances, there should be derogations from the Community principle; in other words, a Community of partly variable geometry, with some common policies adopted by those who want to adopt them, leaving behind those who do not.

More dramatically, they propose an intergovernmental conference to negotiate a new treaty of European Union, which would incorporate the substantive objectives of the Dooge report including, of course, public acquiescence in the principle of majority voting. The main purpose of such a conference would be to set up a theatre of public pressure on governments perceived to be "bad Europeans."

There are those in Whitehall, and they include committed Europeans, who fear that this attempt to force the pace could prove a high-risk strategy all round, with real dangers of back-fire. At one level, there is Anglo-Saxon mistrust of grandiloquent but foggy Euro-fanaticism, in which none of the precise purposes, let alone the utility, of the proposed treaty have yet been properly worked out; at another, there is Mrs Thatcher's natural antagonism to the general aspirations of the "good Europeans," and Mrs Thatcher is not good at submitting to external pressure.

The danger, according to this view, is of a major political bust-up, of which the residual result would be no more than an intensified Franco-German axis; and no-one can want that — especially not the British Government. The trouble with these warnings is that they overlook the more plausible fall-back: that the original Six member states would gang up on actions they can agree on, leaving Britain and her ill-assorted allies with the distasteful choice between tagging along or being left out.

It is all very well to scoff at Chancellor Helmut Kohl as an old muddle-head who does not really know what he wants or how to get it. But it simply will not do for Mrs Thatcher to assume that hers is the only conception of the European Community which is valid and sensible, let alone that she is in a position to determine, by invoking a national veto, the speed or direction of future progress.

In particular, it will not do to assume that the Community can take a leisurely view. Britain, above all, has been banging on about the urgent need to sweep away all barriers to internal trade. Does anyone imagine that this can be done without systematic majority voting? Every year, thousands of new national barriers are erected: this is not a problem which can be tackled effectively by picking and choosing.

Moreover, it may no longer be safe to assume that the debate over the future of the Community can be confined to the gladiatorial contests between mutually uncompdehending national government leaders. There is another method of political mobilisation, more discreet, insidious and tentacular, which for 20 years was identified with the name and influence of Jean Monnet. There is good reason to believe that this method of persuasion and co-option is starting to raise its subversive head once more.

The essence of the Monnet method was that he by-passed the national governments as such, but exercised his relentless powers of persuasion on representatives of national political parties, in opposition as well as in government, and on trade union leaders. Over time, his Action Committee for the United States of Europe counted representatives of almost all the main parties, apart from the French Gaullists and Communists.

Today, a new attempt is being made to revive the Monnet method, by co-opting leading figures across the political spectrum in support of European integration, but this time also by approaching national governments. The object is not to produce yet another Wise Men's exhortation, but to muster political leverage in national capitals for precise programmes of action in priority policy fields. Progress so far has apparently been encouraging, and may shortly reach take-off speed.

In the end, however, the key to progress in the Community wil be majority voting in one form or another. If it does not take the form of majority voting in the Council of Ministers, my hunch is that it will take the form of majority voting in action, through variable geometry agreements. That is the dilemma for the footnote countries—and for Britain.

M Mitterrand greeting Mrs Thatcher at the Franco-British meeting in Paris last week

Lombard

Culture's role in crumbling Africa

By Nicholas Colchester

EXPLOITED REASONABLENESS is an historic source of management indignation. Take a man who runs a cost centre and keeps his outfit lean. He sticks to logical budgets logically computed. He imagines an unseen rapport developing between himself and treasury. Then austerity is dispensed from on high like a bucket of cold water. He is drenched along with the worst of them and wishes he had stuck to unprincipled salami tactics.

There was probably an element of this in the frustration displayed by Sir John Burgh at a lunch in the House of Commons last week. Sir John is dirctor general of the British Council, which this month celebrates its 50th anniversary. After presiding over cuts of 20 per cent in real terms in the council's main budget since his arrival in 1980, he might reasonably have expected his judgement to be respected in this anniversary year. But no: he had to tell his guests of a further 2½ per cent cut back in his real spending power.

The British Council suffered, along with other areas of the overseas budget, in order that the development aid budget be kept relatively intact at a time when famine in sub-Saharan African had given aid sudden political clout in the UK. The irony is that it is precisely the plight of this part of the world that is re-emphasising the value of cultural diplomacy and the short-comings of the recent pattern of bi-lateral development aid. You cannot throw money usefully at ignorance, illiteracy, and corruption, except to provide temporary relief to suffering.

The French are the European champions in cultural diplomacy. They have always striven harder than the British to inculcate "Frenchness" in all its aspects into their areas of influence abroad. Sir Anthony Parsons, Mrs Thatcher's former foreign policy adviser, compared France to Rome, and Britain to ancient Persia, in their attitudes to their colonial dependencies, the one creating an elite class which could participate proudly in the civilisation of the metropolitan power, the other simply imposing efficient administrations on local customs and institutions.

These differences have persisted into the post-colonial era, and during the '60s and '70s the French approach might have seemed anachronistic to the British as they bowed with relative suppleness to the wind of change. But today, when one compares the plight of Uganda, Tanzania or Ghana with that of the countries of French West Africa, one must ask which legacy has proved the more prosperous and durable. The greater residual commitment of the French has preserved an infrastructure in which development aid still has some chance of taking root.

Of course there is much more to the French approach than lies within the scope of the British Council — the administration of the external franc, for instance. But, as the agency charged with the export of Britain's language, education and values, the council still has important benefits to confer. A British Council library, somewhere in Africa, which might have seemed a colonial backwater ten years ago, could well be a lone oasis of intact books today.

There has recently been a tendency to justify the activities of the British Council as an extension of Britain's commercial diplomacy. The argument runs that cultural and educational links translate into commercial relations and that future prime ministers will be inclined to trade with the country which gave them their education. This is, to quote Sir Anthony again, "blindingly obvious" and it is a good, hard-headed argument to use on a hard-headed government.

The argument does, however, have an element of presumption built into it—that the former dependencies will develop and, like Malaysia, become lucrative markets. In reality, the "South" has now split into winners and losers. And it is in the analysis of how to help the losers that a rethink about the cultural element is in order, with much less deference about the worth of the language, the education and the values that Britain can contribute. It is plainly too late to rescue Sir John Burgh's budget for 1985-1986, but not too late to suggest that the Overseas Development Administration lays still greater emphasis on the British Council's work in the next few years.

The real wage debate

From Mr J. Robinson

Sir,—Bryan Gould's article on wage restraint (November 28) makes for depressing reading but, fortunately for the unemployed, it is also misleading. The key to the real wage debate which has raged for so long is the division of an increase in aggregate demand between an increase in output and an increase in prices. In the United States aggregate demand rose sharply from 1982 onwards and, thanks to the flexibility of the labour market—of which real wage movements are an important aspect—a large part of this demand was satisfied by an increase in output and employment while only a small part was wasted in higher prices.

Thus while one cannot argue that the American recovery has been fuelled by falling real wages (has the Chancellor ever argued this?) one can indeed argue that real wage flexibility has been an essential prerequisite of the recovery. The experience of the British economy suggests that the labour market is less flexible than its American counterpart, with the result that the bulk of an increase in aggregate demand is wasted in higher prices. In these circumstances an increase in aggregate demand produces little or no net benefit.

Mr Gould introduces a red herring into the debate by equating the widely-held view that real wage flexibility is an essential means of reducing unemployment with the rather odder view that flexibility is an efficient or even a sufficient means. To disprove the latter view he attempts to show that a cut in real wages would not reduce unemployment. Unfortunately he does not enlighten us on this point because his simulations of the effect of a fall in real wages—both his verbal discussion and also his use of the Treasury model—combines the fall with a tightening of policy which reduces the PSBR, holds interest rates constant and maintains the existing real exchange rate. It is not surprising therefore that the simulation produces little or no change in employment.

Whatever the result of such an exercise, however, it is not particularly useful because it is hard to imagine any government, including the present one, which would not be keen to expand demand if it could be sure that there was enough wage flexibility to allow a worthwhile increase in output. The practical problem, then, is to make some assessment of the degree of flexibility in the economy today and hence of the relative sizes of the costs and benefits of an increase in demand.

J. N. Robinson.
14a, South Hill Park Gardens, NW3.

Letters to the Editor

Taxes and pensions

From Dr D. Brown

Sir,—I am concerned that the Government should apparently be contemplating a number of changes in the way in which pensions are treated for tax purposes. These changes will affect a wide range of people but are concentrated within the groups whose interests, the Government, most affects to protect.

In 1983 Norman Fowler started an enquiry into the transferability of pensions. Much of the discussion at that time highlighted many public (and Governmental) misconceptions as to what was fair when employees transferred their pensions entitlements from one employer to another. In brief many, including apparently, Mr Fowler, seemed to believe that "fairness" was represented by a transfer of years of service: this is not the case! It is not the case because there are manifest differences between company pension schemes. The first and most obvious difference may be the accrual rate (eg 1/60 per year of service) other clear differences may exist in widows pension rights, etc. Such differences however ignore what is probably the most significant aspect that is the security of the promises which are made to employees on company schemes. The promises may look the same but are based on different funding assumptions. There are schemes where weak funding assumptions have already reduced to fulfilling only the minimal promise—pensions have been frozen! The effects of this can be seen by considering a 5 per cent inflation rate—this would reduce real income to 78 per cent in five years and a mere 61 per cent in 10 years.

After some debate the Government dropped its initial suggestions on transferability and commissioned "a consultative document." This was published in July 1984. The document itself is very bland and says little and it is its failure to be explicit which I find disturbing. It is disturbing because it fails to address any issue in detail and hence appears innocuous. This could well be far from the case. Hence the need to be explicit.

The second point which gives me great cause for concern is the suggestion that the Chancellor may be considering changes in the tax concessions to pension schemes at their present level of benefits. Hence either a reduction in company profits or a reduction in pensions—neither seems a good option nor does the proposal seem to fulfil normal concepts of equity.

(Dr) David E. Brown.
5, Beechwood Close, Weybridge, Surrey.

Reconstruction in the High Street

From the Chief Executive, International Stores.

Sir,—I am writing concerning what I regard to be somewhat unfair aspects of your reporting of the recent acquisition of International Stores by the Dee Corporation. In particular I refer to David Churchill's news item of November 23.

Our concern is principally Mr Churchill's summary of International Stores as going "from bad to worse over the last decade with poor management and little sense of direction." The current board, reformed under my lead two years ago, has much to be proud of and Mr Churchill's dismissal is damaging to their credibility as well as devaluing the asset that Mr Monk has purchased.

First points of fact. Mainstop was a BAT Stores experiment, wholly separate from the International chain. International's only management role in the Mainstop interlude was the rationalisation and refurbishment of those stores which BAT Stores could not sell off at the end of the venture.

Mr Churchill allows "an improvement in profitability in recent years." I would argue that a turnaround from £3.5m trading loss in 1981 to a profit of £10.3m in 1983 compares with the best rates of improvement in the grocery business and the high street in general. Further to this the published profits for the first half of 1984 showed a 30 per cent increase on the comparable period in 1983, so you can see this improving trend has continued.

More importantly, this was not achieved by a once-off simple rationalisation. These improvements were delivered while a massive programme of refurbishment, reorganisation and redirection was under way. Two hundred stores, representing 70 per cent of International's turnover were refitted and updated in the last 18 months; a non-existent development programme was transformed from a standing start into the largest new building programme proportionate to size in the grocery trade, with 12 store openings in 1984 and over 20 lined up for 1985. Every major supermarket's objective has been increased fresh food business — while we haven't been on TV talking about it —we have radically improved the profitable fresh food share of our business. In a little over a year 650 newly designed and specified own label lines have been launched enabling International to catch up with industry averages.

Improvements such as these have enabled us to attract some of the brightest young people from our competitors to participate in this reconstruction and in spite ofthe demands of steadily improving profitability we have invested in new talent and training more than ever before.

Having more than satisfied all the objectives set for us by BAT Industries over the last two years I am confident that this management will meet any changed objectives from our change in ownership.

David Caulfield,
Oceano House, Bracknell, Berks.

A merger of minds

From Mr M. Price

Sir,—Having got through the day's backlog at 8.30 pm last Thursday, I was able to turn my attention to less pressing matters, namely reading past issues of the Financial Times. Having established the context in which I write, I see from Mr Turnbull's letter of November 14 that the toffee shop auditor mentality is still alive and well in the ranks of the Institute of Chartered Accountants in England and Wales.

I find his attitude unconstructive—for my own part, I know and respect many chartered accountants from the English Institute: the assertion that one must visit the local golf course to trace them after 11.30 am should be dismissed as a foul calumny brought about by envy. I am sure that many of them deserve six-figure salaries and associated perks.

Equally, I am sure that both the ICAEW and Chartered Institute of Public Finance and Accountancy harbour reactionary elements who will oppose the merger from the shoddy motives of mistrust and misplaced snobbery, rather than considering the potential benefits to both chartered institutes and to the profession as a whole: they get our quality, we get their numbers. Who knows, we might even start to understand each other from knowledge rather than denigrating from prejudice.

M. G. Price
5 Fox Close, Emley, W. Yorks.

FINANCIAL TIMES

Monday December 3 1984

Terry Byland on Wall Street

A subdued celebration for bulls

THE TWELVE-MONTH anniversary of Wall Street's most recent bull market was celebrated last week in chastened mood. The Dow Jones industrial average ended the week 7.7 per cent below the 1,287 peak, and the stock market was shuffling downwards, pressing on the lower end of the trading range of 1,180 to 1,240 established since the summer.

Moreover, the market's unease was accompanied by a slightly bewildering array of straws in the wind. On the one hand, the board of General Motors, on the back of favourable sales trends in November, announced highly bullish views of the outlook for next year. But on the other, Mr John Templeton, of the highly successful Templeton Mutual Fund group, disclosed that his funds have shunned IBM stock because of the competitive nature of the computer industry.

Meanwhile, Wall Street, already unsettled by reports of White House fracas over budget spending plans, also has to contend with the Treasury's proposed tax restructure. The Treasury announcement has already prompted postponement of one Wall Street new issue, and heightened the atmosphere of investment caution in other ways.

Under these conditions, it is hard to see the stock market catching fire. The argument that every indication of a slowdown in the economy is also an argument in favour of further easing in Federal Reserve credit policy begins to sound slightly hysterical.

Bateman Eichler, Hill Richards, points out in its latest investment summary that if the Fed is waiting to see the effects of the first round of rate cuts before trying again, then Wall Street could be disappointed. Bank prime rates have fallen from 13 per cent to 11¼ per cent over the past six weeks – and seem set to fall to 11 per cent, with or without another reduction in the federal discount rate – but the Dow average has fallen by more than 17 points over the same period. So much for the much-vaunted easing by the Fed, at least as far as the stock market is concerned.

Now, just to complete Wall Street's confusion, money supply has jumped sharply and Dr Henry Kaufman warns that the Fed may stay its hand, after all.

This is still a sector stock market, with the financial sectors outperforming the rest by a wide margin. Paine Webber follows the trend in recommending this sector, but includes some original twists to the theory that falling interest rates usually benefit the financial institutions before they benefit the borrowers for whom they are intended.

The firm believes that the strong rise in the savings and loans groups has outrun itself and that present stock prices for such leaders as F.H. Ahmanson, or Californian Federal Savings and Loan should only be bought by those anticipating further, and substantial, falls in interest rates.

The rise in S&L stocks reflects that balance sheets will benefit from lower rates, earnings forecasts have in fact been downgraded by several brokers in view of the slowdown in the housing industry on the back of the economic slowdown.

Paine Webber is loyal in recommending stocks in the brokerage industry which have already begun to pull themselves out of the slough into which they fell as earnings slumped badly. In October stocks in the securities houses gained about 2.3 per cent against a background of a flat stock market. The key is the reduction in costs, largely because of the cutback in salaries and other compensation which represent 60 per cent of total expenses. Now, with bond prices strongly higher, Merrill Lynch, for example, increased earnings from principal transactions from $59m to $168m in the third quarter.

Some Wall Street analysts are taking a more favourable view of the money centre banks, which have been downgraded since the middle of the year. Some analysts believe that the "disaster scenario" in the Latin American loan department is now less likely. For the short term, Latin America, with the notable exception of Argentina, appear to be making progress on their liquidity problems. For those still bullish of the U.S. economy, there is the prospect that a long-term improvement in the free world economies will improve the outlook for Third World debtors.

There is a kick in the tail of the improvement in outlook, however, for the money centre banks. The U.S. regional banks which have risen strongly this year now look vulnerable to the problems of the domestic farming and energy industries revealed by Continental Illinois or First Chicago. Paine Webber is downgrading to neutral its rating of the West Coast banks

Case-IH consolidation may take three years

BY ANDREW GOWERS AND IAN RODGER IN LONDON

CONSOLIDATION of the European farm equipment operations of J. I. Case and International Harvester will not begin for several months and might take up to three years to complete.

A Case official said yesterday at a London press conference that the overlap between the Case and IH factories and dealer networks in Europe would be eliminated and Case would probably settle on a single line of products at some point rather than maintain both brands.

Last week, Tenneco, the parent company of Case, bought IH's farm equipment businesses in the U.S. and Britain and options on its French and West German operations for $430m.

The Case spokesman said a detailed review of all European operations, including Case's four construction equipment plants, would be carried out over the next "several months." Case would help dealers merge and, in some instances, it would close company-owned dealerships rather than hurt strong independents.

This week, Tenneco officials will visit banks in France and West Germany to seek the transfer of IH's local finance arrangements so the options to purchase those subsidiaries can be exercised.

Although Tenneco has said it would, if necessary, carry on in Europe without IH's French and German businesses, it wants them very much. IH is a leading tractor supplier in these countries, with a 14 per cent share in France and a 16 per cent share in West Germany, whereas Case itself has only minimal shares.

Moreover, Case needs the IH plant at Neuss in West Germany, which is profitable and makes engines for all IH tractors in Europe, including those assembled in Britain. Even though Case may ultimately want to use its own new engines in these tractors, the company spokesman acknowledged yesterday that, for technical reasons, any change would be two years away.

Mr Donald Lennox, IH chairman, said at the press conference that the company's farm equipment division was heading for another $300m loss in 1984-85 before the Tenneco deal was made. He predicted further mergers or collapses in the farm equipment industry because of depressed markets.

The Case-IH deal is bound to be the main talking point at the Royal Smithfield Show, which opens in London today. Rival manufacturers preparing their stands yesterday welcomed the move as a step towards eliminating excess capacity, but agreed it was not enough.

In the UK, tractor registrations have fallen more than 9 per cent this year; sales are down 4 per cent in money terms. Industry executives are bracing themselves for another dull year.

Europrogramme faces failure as shareholders call for repayment

BY ALAN FRIEDMAN IN LUGANO

EUROPROGRAMME, the troubled L1,000bn ($525m) Lugano-based property fund controlled by Sig Orazio Bagnasco, the Italian financier, may have to be liquidated next spring if a solution to its problems cannot soon be found.

The fund is the flagship of an international network of property, tourism and financial companies controlled by Sig Bagnasco, the Genoa-born entrepreneur who also owns the Ciga chain of luxury hotels. The network has a stated net worth of $1.5bn.

Since 1969 a total of 75,000 shareholders, almost all Italian, have bought the unquoted but redeemable Europrogramme shares. Many of these were sold door-to-door in Italy, a practice which, although not illegal, has been criticised by several prominent Italians.

Sig Bagnasco, in his first public comment on the fund's difficulties, said that if the Italian parliament does not pass a law enabling him to convert the fund into a quoted company on the Milan bourse, it is quite possible that it will have to be dissolved.

That is because of claims by several thousand shareholders who are demanding immediate redemption of their unit trust certificates.

Conversion to a quoted company would offer shareholders a chance to trade their shares, while liquidation would result in Sig Bagnasco having to sell Europrogramme's property holdings when the Italian property market is depressed.

Claims by shareholders at present total about L75bn, against Europrogramme's L30bn of liquidity.

Over the past few months the number of shareholders demanding redemption has increased dramatically amid fears about the value and liquidity of the fund.

Sig Bagnasco's fund has been told by the Swiss authorities that because of this situation, no redemptions need be executed until next March. After that the fund could well be liquidated in the face of mounting demands and far too little available cash.

Sig Bagnasco, who is facing criminal investigations in Lugano and Milan as a result of complaints to magistrates by shareholders from his fund, said he was pessimistic about the chances of the Italian legislation being passed in time to avoid liquidation.

The 57-year-old financier declined to specify as to who was behind the "series of incredible allegations" against him. He maintained that there were "personal and political issues here."

Legislation, which would allow Europrogramme to "Italianise" its Swiss property fund and thus offer its shareholders the chance to trade the shares on the Milan bourse, was stopped by the Italian Treasury Ministry on November 6

UK miners face funds threat

BY PHILIP BASSETT, LABOUR CORRESPONDENT, IN LONDON

BRITAIN'S National Union of Mineworkers will today decide whether to maintain its defiance of the courts as renewed legal efforts are made to take control of its finances.

The NUM'S executive committee, meeting in emergency session in London last night, decided to recall for this afternoon the union's special delegate conference. The delegates will decide whether to comply with the courts following the failure of the union's appeal against the appointment of Mr Herbert Brewer as a receiver to take over the financial running of the union.

Shifting the responsibility for a decision on the court orders, which were made as a result of legal actions brought by working miners, to the left-dominated special conference looks like a partial victory for NUM president Mr Arthur Scargill and the strikes leadership over an executive now thought to be deeply divided over whether to continue the union's defiance of the courts.

Previous delegate conferences have consistently supported the leadership's position and maintained the strikes in the face of all odds, and a similar decision today must be possible.

Mr Scargill put great emphasis on the fact that the union's executive was acting after taking legal advice. The union's lawyers attended the executive meeting, together with Lord Wedderburn of Charlton, a leading labour lawyer, and senior legal experts from the Trades Union Congress (TUC).

The TUC is advising its affiliated unions that it is not against TUC policy to attend court hearings or pay contempt of court fines, such as the NUM is facing.

There is a possibility that, on legal advice, the conference might decide to comply with the court in order to avoid the receivership order being kept in force.

Mr Scargill last night stressed the seriousness of Mr Brewer's appointment. He said that it posed "the most fundamental threat to every trade union in the country as well as putting at immediate risk the very existence of the NUM."

He said that the decision to appoint a receiver for the first time in the history of the British trade union movement "threatens us with the situation in which it could become almost impossible for the National Union to carry out its day to day operations to service the membership," which it is required to do under its own rules.

In the light of the failure last night of the NUM Executive to make a clear decision on the high court's rulings, it seems likely that Mr Brewer will today make a fresh attempt in Luxemburg to take control of the £4.63m ($5.7m) of the central NUM's funds held in an account at Nobis-Finanz International, a Luxemburg bank.

Recovering union funds, Page 8

London bank adviser for Hong Kong

BY DAVID DODWELL IN HONG KONG

AN ADVISER from the Bank of England's banking supervision department has been appointed to Hong Kong's banking commission. The move caps a number of recent changes in the British territory to tighten regulation of its banking and securities industries.

No official announcement has yet been made about Mr Richard Farrant's two-year appointment as adviser to Hong Kong's banking commissioner. The appointment has been made at the Bank of England's suggestion and follows criticism of Hong Kong's banking practices by a special Bank of England team early this year. Scandal has surrounded the collapse of several financial institutions in Hong Kong in recent years.

A month ago, Mr Robert Fell, a former chief executive of the London Stock Exchange who was appointed Hong Kong's securities commissioner in 1982, was appointed banking commissioner. Although Mr Fell is widely respected in the territory, some concern was expressed at his appointment because he has had no previous professional experience in the banking industry.

One senior government official said yesterday: "Robert Fell has enormous experience in the financial field, but will willingly admit himself that he is not a banker. Richard Farrant will underpin him in this respect."

He added that the Hong Kong Government was determined to strengthen supervision of the local banking sector, albeit "steadily and calmly."

Criticism of Hong Kong's banking commission has mounted over the past year, with scandals surrounding the collapse in 1982 of Dollar Credit, a local deposit-taking company (DTC).

World Weather

		°C	°F			°C	°F			°C	°F			°C	°F
Ajaccio	C	13	55	Dubrovnik	S	18	64	Malaga	F	17	63	Salzburg	F	7	45
Akrotiri	S	19	66	Faro	C	15	59	Malta	S	20	68	Seoul	S	7	45
Algiers	C	12	54	Florence	R	12	54	Manila	C	29	84	Singapore	C	31	88
Amsterdam	C	6	43	Frankfurt	C	0	32	Miami	C	26	79	Stockholm	C	5	41
Athens	C	14	57	Funchal	-	—	—	Milan	C	5	41	Strasbourg	C	2	36
Bahrain	S	23	73	Geneva	R	6	43	Moscow	C	-4	25	Sydney	C	24	75
Bangkok	F	31	88	Gibraltar	S	17	63	Munich	C	2	36	Taipei	C	19	66
Barcelona	S	13	55	Guernsey	S	9	48	Nairobi	F	24	75	Tangier	C	17	63
Beirut	C	11	52	Helsinki	C	8	46	Naples	C	14	57	Tel Aviv	C	21	70
Belfast	S	9	48	H. Kong	S	18	64	Nassau	C	27	81	Tenerife	C	21	70
Belgrade	C	5	41	Innsbruck	F	15	59	New Delhi	S	22	72	Tokyo	S	14	57
Berlin	S	5	41	Inverness	C	10	50	New York	S	14	57	Toronto	C	6	43
Biarritz	C	11	52	I.o.Man	S	8	46	Nice	S	9	48	Tunis	S	16	61
Blackpool	C	7	45	Istanbul	C	7	45	Oporto	S	15	59	Valencia	F	19	66
Bordeaux	S	11	52	Jersey	S	12	54	Oslo	C	3	37	Venice	F	13	55
Boulogne	C	10	50	Jo'burg	S	21	70	Paris	C	6	43	Vienna	S	4	39
Bristol	S	5	41	L. Ang.	S	20	68	Perth	C	15	59	Warsaw	C	5	41
Brussels	S	5	41	Las Palmas	C	20	68	Prague	C	5	41	Zurich	C	6	43
Budapest	S	5	41	Lisbon	S	17	63	Reykjavik	F	1	34				
B. Aires	S	24	75	Locarno	S	11	52	Rhodes	S	18	64				
Cairo	F	22	72	London	C	10	50	Rio de J'o	F	31	88				
Cape Town	S	17	63	Los Angeles	C	21	70	Rome	S	18	64				
Cardiff	S	10	50	Luxembourg	R	2	36								
Casablanca	C	18	64	Madrid	S	10	50								
Chicago	S	5	41	Majorca	T	12	54								
Corfu	S	18	81												
Dublin	S	3	37												

Readings at mid-day yesterday

C–Cloudy D–Drizzle F–Fair Fg–Fog R–Rain S–Sun Sl–Sleet Sn–Snow T–Thunder

Poll setback for Hawke

Continued from Page 1

voters, who intentionally filled their ballot papers in wrongly, "both over Mr Hawke and some of his more incoherent programmes."

Although damaging to Mr Hawke's authority, the result is unlikely to provoke any alteration in government policies. Mr Hawke said yesterday he was unlikely to make major cabinet changes, or to give it a more left-wing flavour.

On the other hand, the result has revitalised Mr Peacock's and the Liberals, who have now firmly set their sights on dislodging Labor at the next election.

Test crash a setback for ICI fuel additive

By Elaine Williams in London

ICI'S HOPES to introduce a revolutionary fuel additive to prevent lethal fireballs from engulfing crashed aircraft on impact will be set back by at least a year after the apparent failure of a spectacular test crash over the weekend.

The $11.7m crash on an airstrip in the Mojave desert in California, paid for by the Federal Aviation Administration (FAA) and the National Aeronautics and Space Administration, was supposed to prove that ICI's Avgard additive could reduce the risk of fire. Instead, the aircraft was engulfed in flames and ICI researchers will spend the next few days trying to find out what went wrong.

Mr David Lane, ICI's product manager, who saw the test, said: "Despite the outcome of the test, we will be stepping up our commitment to the programme."

If that crucial test had proved Avgard's effectiveness, the FAA planned to issue a "Notice of Proposed Rulemaking." That is an important step in making compulsory the adoption of safety systems in aircraft. The FAA has not ruled out the possibility of issuing such a notice despite the outcome of the test.

Saturday's test was just one of many increasingly severe tests Avgard has undergone since 1978. Four controlled crashes of obsolete U.S. Navy Neptune aircraft mounted on high-speed tracks have taken place but none was carried out on an airborne aircraft coming into land.

A disaster on the ground at Tenerife Airport in 1977, when two jets collided, showed the danger of fire in potentially survivable crashes. The fire hazard occurs when fuel escaping from ruptured tanks forms an explosive mist which for example can be easily ignited with sparks from broken metal pieces scraped together.

ICI Chemicals has spent more than $10m and 17 years on the development of the fuel additive, with hopes that the market for Avgard would be worth more than $1bn a year.

The company came up with a polymer codenamed FM-9, which, when mixed with a "carrier fluid," forms the Avgard additive. When added to jet fuel, it creates an anti-misting kerosene. ICI and the Royal Aircraft Establishment at Farnborough discovered that fuel misting was reduced or prevented when a high-molecular-weight polymer was dissolved in kerosene.

Preventing the mist forming would stop engines working, as all aeroengines function by turning fuel into a fine mist which is sprayed into a combustion chamber and ignited. So designers have added to the fuel line supply an extra piece of equipment called a degrader, which negates the effect of the additive just before the fuel enters the combustion chamber.

The test did not go as planned. Engineers had designed the test to be potentially survivable with the Boeing 720 climbing to an altitude of 2,300 ft before being brought down by radio control to about 150 knots to crash-land with its undercarriage up. The fuel tanks in the wings were to be broken by obstructions in the ground and then exposed to ignition sources in the form of three sets of landing lights. The fuselage was to remain intact.

However, one wing was broken on landing but the fuselage penetrated by the runway obstacles ruptured the tanks under the fuselage. A large fireball erupted on impact and was then followed by a secondary fire, which caused considerable damage to the passenger cabin. This may therefore not be a valid test for Avgard.

Mr Lane said: "We had maintained all along that there would be flames from engines as they burned, spilling fuel, and also small fireballs behind the aircraft. The plane was to have slid away from these but it appears not to have done so."

U.S. officials have yet to pass judgment on the additive, which they said had extinguished an initial fire on board the airliner.

Kuwait stock market

AN article in Friday's FT about the Kuwaiti Government's decision to set up a committee to consider the country's stock exchange problems stated erroneously that the present crisis in the stock market could lead to political instability. This should have read: financial instability. We regret any embarrassment caused by this error, which was made during the processing of the story in London.

THE LEX COLUMN

Johnson Matthey passes the hat

The unfortunate shareholders of Johnson Matthey have had a thorough grounding in the matter of risk capital – and a few other things besides – over the past two months and will be attending another class on the subject this week. At Thursday's extraordinary general meeting they will be asked to approve a £25m capital injection for the company. The outcome of the vote is not in serious doubt, since the alternative to approval is too horrible to contemplate. Having cleared the way for a capital reconstruction, a great many shareholders may then be tempted to vote with their feet on taking up the offer. After the astonishing developments of the past few weeks, that would be a quite natural reaction. But it would also be mistaken.

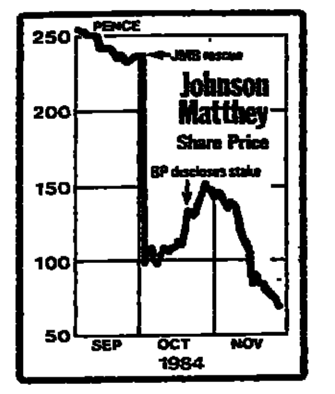
The commercial argument for subscribing does not look overwhelming on paper. By Friday evening the Johnson Matthey share price had sunk to 68p, only 12p clear of an effective issue price which as recently as a fortnight ago looked to be in the bargain basement category. The downside risk, even at 56p, is material. Johnson Matthey in its present form is as good as bust – the debt/equity ratio is about 160 per cent on fairly cautious assumptions – and the offer document itself is larded with warnings about further provisions and calls on capital.

Those warnings are not to be taken lightly. In its last annual report, JM stated solemnly that it had withdrawn from the finished jewellery market in the U.S. and had disposed of its stocks and other assets there. Yet, in the dismal interim statement accompanying the offer document, the company provided a further £10.8m against the cost of closing the U.S. jewellery business. Johnson Matthey is not a reliable investment.

Nor is it likely to provide much by way of dividends to ordinary shareholders. Any payment must first be approved by the bank creditors; taking £250m as a base load of debt, JM's annualised interest costs will be around £27½m. Even taking a charitable view of the trading potential, that will not leave much for distribution.

But, if the Johnson Matthey saga has exploded any particular theory, it is that of efficient markets. The shares were, in retrospect, ludicrously overvalued just before the collapse of the banking division and there is no reason to suppose that they are correctly priced now.

Both Charter Consolidated and British Petroleum have a vested interest in seeing the share price lower. Charter stands to pick up any spare stock as underwriter, which could theoretically lift its stake in JM to 46 per cent. BP, meanwhile, has declared its interest in making an offer for JM and cannot therefore be regretting the slide in the price.



Last week saw persistent and heavy selling of JM equity, apparently through one jobber. There was no reason to connect the sales with either Charter or BP but the dealing was certainly not unhelpful to their cause.

To complicate matters further, BP is awaiting information from trading partners of JM, notably Rustenburg Platinum for whom JM sells the metal outside the U.S. This information has not so far been forthcoming. Rustenburg has connections with the Oppenheimer group of companies, which in turn has connections with Charter and, through it, with JM. All in all, the market would not have been astonished to learn that last week's selling emanated from South Africa.

The conflicts of interest do not end there. The present chairman of JM is also the chief executive of Charter and his letter to JM shareholders, while accurate in every particular, should be viewed in that light. It may be that the letter, like the share price, takes an unduly dismal view of the company's prospects.

JM does, after all, sport several significantly profitable businesses, not least chemicals and refining. While there is little doubt that the group will require a further injection of capital, asset disposals and stock shrinkage could contribute mightily to the restoration of the balance sheet. New management could contribute in equal measure to the rehabilitation of the revenue account.

Assuming that the auditors uncover no further horrors, JM's fully-diluted net asset value should on paper be at least £1 per share, while on the same basis earnings for the present year should exceed 8p per share. Either way, the 56p conversion price hardly looks expensive, particularly as shareholders enjoy the short-term protection of an 8 per cent coupon on the preference stock. And the valuation takes no account of either a bid from BP or the use to someone else of tax losses in the order of £200m.

No one emerges with any credit from the Johnson Matthey affair. That the directors failed to exercise proper stewardship goes without saying; the JMB collapse showed up serious shortcomings in the Bank of England's supervisory methods, while Charter Consolidated demonstrated the limited value of 30 per cent holdings, even when accompanied by notional boardroom clout. The institutions, meanwhile, clearly acted too late in protecting their investment. It would be regrettable if, by failing to take up their rights, ordinary shareholders succeeded in making this rum tale even rummer.

Telecom

Kleinwort, Benson has cheerfully routed the stags through the simple stratagem of alotting no more than 800 shares in Telecom to anyone and depriving the really heavy applicants of any equity at all. This basis of allotment has the virtue of simplicity and also ensures the widest possible distribution. But it will leave the unsatisfied subscriber searching very hard for sellers when dealings begin this afternoon.

Few private investors will be keen to sell until their allotment letters arrive and the high proportion of bonus applicants suggests that most new shareholders are keen to retain Telecom as a long-term investment. Wall Street is the most obvious source of paper but it is unlikely that the transatlantic traffic will be heavy enough to meet the pent-up demand in the UK.

But, artificial or not, today's premium should ensure that anyone who has been allotted shares can exit with a tidy profit. Taking the most extreme example, an applicant for 100,000 shares will recoup dealing costs and interest lost on the cashed cheque if the shares rise only to 62p in partly-paid form. There should be enough hungry buyers around this afternoon to see that target exceeded by a wide margin.

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SECTION II – COMPANIES AND MARKETS

FINANCIAL TIMES

Monday December 3 1984

Euroyen issue rush may lead to severe case of indigestion

THE DAWN of a whole new era breaks today in the Euromarkets with the official opening of the Euroyen bond market to non-Japanese corporate borrowers and government agencies.

Last week saw a frenzy of activity in both the bond market and certificate of deposit market which has also been liberalised from this week. There are now six new bond issues totalling nearly Y120bn under starters orders, and as is often the case with novelties, most have been well received by investors.

Market behaviour, though, is already enough to set some bankers thinking. Have new issue managers in the born-again yen market already committed the original Eurobond sin of gluttony? In other sectors feast can quickly be followed by famine as investors get indigestion.

One reason for concern about such a large new-issue volume is that there is relatively little attraction to international investors in putting their money in yen. It is a currency that carries a low interest rate – most of the new issues yield about 7 per cent or slightly lower – and has little scope for appreciation against the dollar so long as capital exports from Japan continue to run at a high pace.

For the time being, however, such thoughts are evidently not uppermost in the minds of investors, least of all those who regard currency diversification as good in principle rather than just a matter of speculation. In the past it has not always been easy for these investors to find the right instrument. Domestic government issues are subject to tax, and Samurai issues (foreign bonds launched in the domestic market) are generally hard to trade.

What new issue managers are therefore counting on is a substantial pocket of pent-up demand for yen instruments that are free of restriction to buy and easy to deal. In that sense the more paper that hits the market in the early days the better as it will speed the development of secondary market trading.

It also helps that so many Eurobond issue managers are keen for prestige reasons to promote the new market. Obviously it was not going to take long before one of the primary market leaders like Credit Suisse First Boston (CSFB) turned up in a lead position on a new issue. That is just what happened on Friday.

CSFB is running the books on the new Y20bn bond for Pacific Gas, the first time this position has been won by a non-Japanese institution.

All the razzamatazz in the Euroyen market tended to divert attention away from the dollar sector last week. It was not as if other sectors were quiet either. Apart from an exceptionally heavy DM 920m new issue volume in Germany, the Ecu market scored two firsts. The Yankee issue for the EEC was increased by Ecu 50m to Ecu 200m, and on Friday Heron International of the UK launched a floating rate note, the first Ecu bond to carry warrants.

Elsewhere, the $700m tender of floating rate notes by Sweden was about three times oversubscribed, confirming this borrower's ability to raise funds on a London Interbank Bid Rate basis. The average price fetched was 99.31 per cent with a high of 99.42 and low of 99.28. Income rights of 3/16 per cent were sold at $70 apiece in respect of half the issue.

The steep increase in U.S. money supply meanwhile proved less of a jolt than had been expected in the fixed rate dollar sector. The 11⅝ per cent issue for Household Finance slipped to a discount of 2⅜ points on Friday, well outside its total fees of 1⅞. But the $200m issue for Kellogg, which has the same fees, traded at just less than ¾ for the seven year tranche and less 1⅛ for the five year portion.

Peter Montagnon

Nestlé facility ends the guessing game

IF EVER there was an occasion for the Euromarket to rely on its often overworked rumour mill, Friday's announcement of a $1bn note facility for Nestlé was it.

The facility, first mooted 10 days ago, was down-played by Nestlé last Tuesday when Herr Helmut Maucher, managing director, said it was on ice until the U.S. Federal Trade Commission ruled on the group's proposed takeover of Carnation. With great fanfare, the facility was suddenly launched late on Thursday night.

It is not as if Nestlé had much to be shy about. Not only is the facility the largest of its kind yet seen for a prime corporate borrower; it also comes on predictably fine terms, although the structure is complex.

Led by Credit Suisse First Boston the three-year facility replaces a $2.5bn temporary bank loan taken out when Nestlé first announced the Carnation bid. It can be used to back up the issue of commercial paper in the U.S. or of short-term notes in the Euromarket. Or it can be used to arbitrage between the two.

The fact that Nestlé can contemplate such arbitrage illustrates its exceptionally high standing in the Euromarket, where borrowing is normally more expensive than in commercial paper. Bankers believe that Nestlé should be able to sell three-month Euronotes at a yield some ⅛ point below Libor, which would be just about on a par with the cost of commercial paper.

A facility that allows it to switch from one market to the other as relative costs fluctuate obviously thus has great appeal, but to make it possible, Nestlé has had to include an unusually large $500m swing line that can be drawn on on a same-day basis to meet any cash shortfalls. Those can arise because the payment process for commercial paper is immediate, while in the Euromarket it takes two days.

Drawings on the swing line will bear interest at the U.S. prime with a one-basis-point fee each time a drawing is made.

The basic underwriting fee on the facility is 5 basis points whether the back-up is used or not, although so long as it remains undrawn in the first year it will only be 1/32. There is a graduated scale of charges for actual use of the back-up facility, which means that any drawings will effectively yield a return to underwriters of about 20 basis points over Libor.

That means that Nestlé will pay a relatively heavy price in the unlikely event that it actually has to draw on the back-up. At the same time the underwriting commitment from banks is being provided very cheaply.

There is some contrast with the recent $300m facility for BAT Industries, which paid no commitment fee at all on its back-up element. By contrast, Nestlé is paying an underwriting fee and in return is assured of an absolute ceiling on drawing charges. (In the BAT case, underwriters may name their own price if they are forced to bid for the notes).

Bankers believe that the different structure is explained by Nestlé's need to demonstrate to the U.S. authorities that it has a firm commitment from its bankers to finance the Carnation deal, and a commitment for which it is paying is more plausible than one that is free. At the same time, some argue that BAT Industries might be in for a rough ride if it does ever draw on its back-up, since the price charged by underwriters might at that stage be very high.

Elsewhere, Esselte AB has mandated Enskilda Securities, Merrill Lynch and Hambros to arrange a $100m, seven-year Euronote facility. As in last week's issue for Bank of Baroda, the borrower itself will determine the price of the notes, while giving underwriters guaranteed access to a certain portion.

Peter Montagnon

NEW INTERNATIONAL BOND ISSUES

Borrowers	Amount m.	Maturity	Av. life years	Coupon %	Price	Lead Manager	Offer yield %
U.S. DOLLARS							
Tasgami Corp. §‡	20	2000	16	3¼	100	Yamaichi Int.	3.250
Sumitomo Realty & Dev. ¶‡	40	1989	5	8	100	Daiwa Eur., Sumitomo Fin. Int.	8.000
Yamaichi Sec. §‡	20	2000	16	3¼	100	Yamaichi Int., CSFB	3.250
Yamaichi §‡	20	1995	11	3¼	100	Yamaichi Int., Mgn. Stanley	3.250
Sweden †‡	700	2005	20	(j)	99.31av.	Tender Sale	–
Nippon Electric §	150	2000	15	(3¼)	100	CSFB, Yamaichi Int., Daiwa, SBCI	*
Sanwa Int. Fin. ‡	150	1992	7	11⅞	100	Mgn. Stanley, Sanwa Int., CSFB, Kidder Peabody, Mgn. Guaranty	11.875
Amca Int. (d) ‡	50	1999	15	12¼	99¾	Orion Royal Bank	12.287
Kellogg Co. ‡	100	1992	7	11¼	99⅞	Goldman Sachs, Deutsche, UBS (Secs)	11.277
Kellogg Co. ‡	100	1990	5	10⅞	99⅞	Goldman Sachs, Deutsche, UBS (Secs)	10.909
Queensland Dev. Auth. ‡	100	1989	5	11⅜	100	CSFB, Deutsche, Merrill Lynch	11.375
EEC ‡	100	1990	5	11⅛	100	Mgn. Guaranty, BNP, S.G. Warburg	11.125
Household Fin. Corp. ‡	100	1992	7	11⅝	99⅝	Goldman Sachs, Deutsche	11.706
Centrust S&L ‡	1200	2010	25	0	5.995	Prudential Bache, Bqe Paribas, Bear, Stearns, Daiwa Euro., Drexel	11.910
US Treasury ‡	1000	1989	5	11	98.927	Tender Sale	11.292
American Brands ϕ‡	100	1987	3	11	100	Mgn. Stanley	11.000
CANADIAN DOLLARS							
World Bank** †‡	100	2083	99	(c)	100	Dominion Secs. Pitfield, Wood Gundy, McLeod Young Weir	–
LTCB ϕ‡	75	1990	5	11¾	100¼	LTCB Int., Mgn. Guaranty, Wood Gundy, Dominion Secs. Pitfield	11.681
New Brunswick ‡	75	1995	10	12	100½	Wood Gundy, CSFB	11.912
AUSTRALIAN DOLLARS							
James Hardie ‡	30	1989	5	13	100	S.G. Warburg	13.000
NEW ZEALAND DOLLARS							
Dunlop Olympic ‡	25	1990	5	15¾	100	Hambros Bank	15.750
D-MARKS							
South Africa ‡	250	1992	8	7¾	100	Deutsche Bank	7.750
UBS Finance ¶‡	200	1991	7	3	100	Dresdner Bk, UBS (Secs)	3.000
Linde Int. ¶‡	150	1994	10	3⅛	100	Deutsche Bank	3.125

Borrowers	Amount m.	Maturity	Av. life years	Coupon %	Price	Lead Manager	Offer yield %
D-MARKS							
Fuji Electric ¶	120	1990	5	(3¼)	100	Deutsche Bank	*
Fenosa ‡	100	1992	7	7⅞	100	WestLB	7.875
East Asiatic Co.** ‡	100	1991	7	7¾	100	Commerzbank	7.750
SWISS FRANCS							
Sumitomo Realty & D. §‡	130	1990	–	2	100	CS	2.000
New Zealand Steel (f)	50 min.	1996	–	(⅞)	*	Bqe Gutzwiller K.B.	*
World Bank ‡	150	1994	–	5¾	99¾	CS	5.784
EIB** ‡	60	1988	–	5½	100	Citicorp (Switz)	5.500
EIB** ‡	60	1992	–	5⅞	100	Citicorp (Switz)	5.875
City of Tokyo ‡	80	1994	–	5¼	99½	SBC	5.316
Ober. Kraftwerke ‡	100	1994	–	5⅜	100	UBS	5.375
Gillette Co. (e) §‡	160	1994	–	4¾	100	Seditic	4.750
Senko Co. **§	35	1990	–	(2¼)	100	Wirtschafts- und Prbk	*
First Boston	60	1994	–	(5⅞)	*	CS	*
Tatsho Chemical** ¶‡	30	1989	–	3¾	100	UBS	3.750
IBM** ‡	300	1987	–	4½	100	SBC	4.500
STERLING							
Korea Exchange Bank (a) †‡	100	1994	10	¼	100	Man. Hanover, Schroder, Baring Bros., LBI	–
World Bank ‡	50	1989	5	10⅝	9¾	Baring Bros.	10.692
World Bank ‡	50	1994	10	11	99¾	Baring Bros.	11.043
All-Nippon Airways (b) †‡	50	1991	7	⅛	100	Citicorp, S.G. Warburg	–
GUILDERS							
Spain	100	1995	8	(8)	*	Amro	*
ECUs							
EEC ††‡	200	1996	7½	9⅞	99½	Bear, Stearns, First Boston, Mgn. Stanley	9.948
Credit National ‡	50	1994	10	10⅜	100	Cr. Lyonnais, BNP, Kredietbank Int.	10.375
Heron Int. (g) †ϕ‡	40	1991	7	⅜	100	Bqe Indosuez, BBL, Deutsche, LBI, Mgn. Stanley	–
YEN							
Sears Roebuck ‡	12.5bn	1991	7	6⅞	100	Daiwa Eur., Dean Witter, Dai-ichi Kangyo, Goldman Sachs	6.875
World Bank ‡	50bn	1999	12.3	7	100	Nomura Secs.	7.000
Swedish Export Cr. ‡	12bn	1991	5.33	6¾	99⅝	Daiwa Eur., Nippon Cr. Int.	6.819
Swedish Export Cr.	10bn	1993	8.4	(6.9–7)	*	Daiwa Secs.	*
Melbourne & Met.** ‡	5bn	1994	7	7½	99.45	Yamaichi Secs.	7.580
Allied Corp. ‡	10bn	1991	7	6¾	100	Nomura Int., CSFB, Salomon	6.750
Pacific Gas ‡	20bn	1994	10	7	100	CSFB, LTCB Int., Nomura Int., UBS (Secs)	7.000

* Not yet priced. ‡ Final terms. ** Private placement. § Convertible. † Floating-rate note. ϕ With debt warrants. ¶ With equity warrants. (a) ¼ over 3-month Libor. (b) ⅛ over 6-month Libor. (c) 0.45% + 3-month T-Bill rates, reset monthly. (d) Coupon reset after 5 yrs. (e) Dual-currency. (f) Spread over average yield on Sw.Confed. bonds, with maturities of 5 yrs or more, refixed after 5 yrs. (g) ⅜ over 6-month Libor. (h) ⅛ over 3-month Libor. (j) Equal to Libid. †† Registered with U.S. S.E.C. Note: Yields are set on AIBD basis.

INTERNATIONAL CAPITAL MARKETS

U.S. MONEY AND CREDIT

M1 jump dashes hopes of Fed relaxation

THE INITIAL euphoria in the bond markets following the previous week's half-point cut in the U.S. discount rate has soon disappeared and there is a growing feeling that perhaps the recent sharp drop in U.S. interest rates has largely run its course.

For most of last week U.S. bond prices drifted lower but the news of a surprise $6.7bn jump in M1 led to a sharp drop in long-term bond prices late on Thursday. The markets generally concluded that the jump in money supply—more than three times the increase expected—had dashed hopes of any further easing in the FED's monetary policy in the short term.

By Friday evening, the government long bond, Treasury 11¾ per cent, due 2014, was showing a loss of around two points on the week at 101 25/32, and its yield had risen over 20 basis points to 11.53 per cent. In the medium and long term corporate bond markets, prices were between 1½ and 1¾ lower on the week. However, prices in the municipal bond market were moving in the opposite direction because of a shortage of supply, and yields in this sector were down between 20 and 40 basis points.

In the short-term money markets rates continued to adjust following the previous week's discount rate cut. The rate at the weekly auction of 13-week Treasury bills on Monday fell 16 basis points to 8.43 per cent and the rate on 26-week bills dropped nearly 30 basis points to 8.50.

U.S. MONEY MARKET RATES (%)

	Last Friday	1 week ago	4 wks ago	—12-month— High	Low
Fed Funds (weekly average)	8.39	9.26	10.10	11.77	8.39
Three-month Treasury bills	8.43	8.49	8.97	10.77	8.36
Six-month Treasury bills	8.67	8.42	9.21	10.83	8.44
Three-month prime CDs	8.66	8.85	9.60	11.90	8.75
30-day Commercial Paper	8.56	8.85	9.45	11.35	8.50

U.S. BOND PRICES AND YIELDS (%)

	Last Friday	Change on week	Yield	1 week ago	4 wks ago
Seven-year Treasury	103⅞	-1⅜	11.50	11.13	11.57
20-year Treasury	99⅜	-2⅜	11.68	11.38	11.63
30-year Treasury	101⅞	-2	11.55	11.32	11.54
New 10-year "A" Financial	N/A	-1⅛	12.25	12.00	12.38
New "AA" Long utility	N/A	-2	12.50	12.25	12.60
New "AA" Long industrial	N/A	-3	12.38	12.00	12.25

Source: Salomon Bros (estimates).

Money Supply: In the week ended November 19 M1 rose by $6.7bn to $552.1bn.

An auction of 52-week bills the following day saw the rate drop to 8.74 per cent, compared with 9.45 per cent at the previous auction a month earlier. The current rate is the lowest since May 1983. Last Wednesday's auction of $6.76bn of five-year and two-month U.S. Treasury notes went well with the average yield dropping to 11.02 per cent compared with 12.78 per cent at the previous auction at the end of August.

The U.S. Government also sold an additional $1bn of special notes of the same maturity targeted at foreign investors, and these went at an average yield of 10.95 per cent, when converted to a semi-annual interest-payment basis.

After some hesitation, U.S. banks began trimming their prime rates again last week, the fifth reduction since September when U.S. interest rates began heading downwards. Citibank led the way on Monday morning with a quarter point cut to 11¼ per cent.

The recent fall in bank prime rates has lagged the steep decline in money market rates since the autumn and most analysts expect banks to trim their rates further in the coming weeks. With the banks' cost of funds now running at under 9 per cent, bank prime rates are currently standing more than 225 basis points higher. Traditionally, bank primes have been set around 150 basis points above the cost of a bank's funds, so there is scope for further falls, analysts argue.

Many economists believe that U.S. prime rates will be 11 per cent or lower by the turn of the year and Bank of America's chief economist, Mr John Wilson, has predicted that rates will fall to 10 per cent by mid-1985.

While prime rates still have some way to go to catch up with the recent sharp fall in U.S. money market rates, analysts are now wondering whether there is much more scope for lower short-term money rates, especially after last Thursday's surprise jump in the money supply.

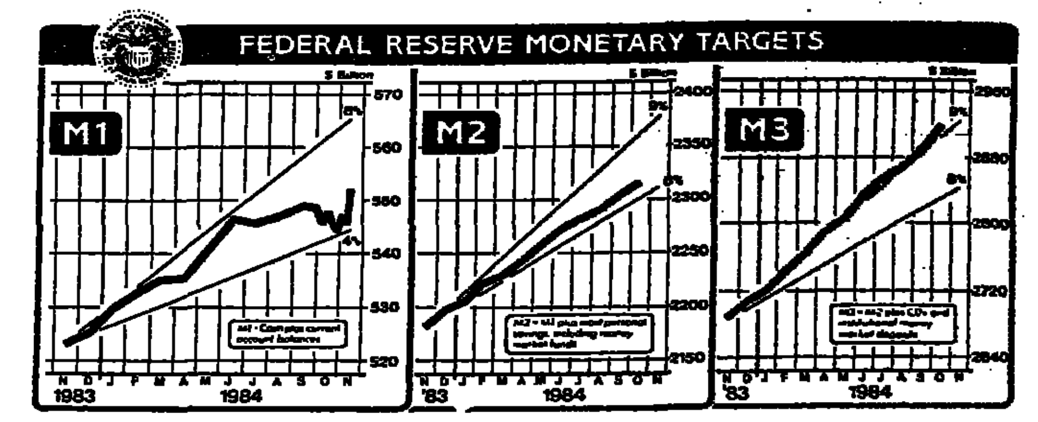
Mr Irwin Kellner, Manufacturers Hanover Trust's chief economist, is one of several leading economists who argue that the jump in money supply plus the recent sharp drop in short-term interest rates is sufficient to restart the U.S. economic engine, if indeed it has stopped. Dr Henry Kaufman, Salomon Brothers' chief economist, says that the Federal Reserve is likely to view the latest rise in the money supply with relief and will keep credit policy steady until there are "clear signals about the economy's direction."

The sharp slowdown in the U.S. economy in recent weeks clearly came as a surprise to the Federal Reserve and last week's economic numbers held out little comfort. The index of leading economic indicators for October was down 0.7 points, the third fall in the last five months of the closely watched barometer of the U.S. economy's future health.

Whereas the Fed had been thinking that the economy would grow by between 3½ per cent and 4½ per cent in the second half of 1984, most economists now believe that it is growing considerably slower. In the third quarter the U.S. economy grew at 1.9 per cent and many analysts believe that it is growing at about the same rate in the current quarter.

The majority of U.S. economists still believe that the slowdown in the U.S. economy is temporary

William Hall



UK GILTS

Yields pattern set to change again

DECLINING U.S. bond yields, since the Federal Reserve relaxed its credit policy in early September, have not been fully matched by falls in the yields on UK gilts. Since August 31, U.S. 20-year Treasury bond yields have dropped by 120 basis points. Their UK equivalents have eased back by only 50 basis points over the same period. The UK market's underperformance of U.S. bonds at least interrupts, and may well mark a reversal in, an eight-year trend of UK out-performance.

The record of the past eight years shows that UK bond yields swung from a position in 1976 where, on average, they stood 5.4 percentage points over the yields on U.S. Treasuries to a position in 1983 where they were 1.7 percentage points under those yields. Furthermore, this swing proceeded fairly regularly at an average rate of slightly more than one percentage point per year.

The UK-U.S. yield differential in the mid-1970s probably reflected two factors. First, UK inflation was then more than 10 percentage points higher than inflation in the U.S. Second, the UK budget deficit represented around 8 per cent of GDP, compared with a corresponding proportion for the U.S. Federal budget deficit of 3 per cent.

By the early months of this year, by contrast, the UK was seen to be substantially better placed than the U.S. in terms of budgetary control and possibly also with regard to inflation prospects. The UK budget deficit, as a proportion of GDP, had been brought down to around 3 per cent, while the U.S. deficit had mounted towards 6 per cent of that country's GNP.

On inflation, the hope in the UK was that the Government, having brought the rate down to 5 per cent, would press on to achieve a 3 per cent rate or even price stability. In the U.S., where inflation was already in the 3 to 4 per cent area, there were fears that rapidly-approaching capacity constraints would drive the rate up to 6 per cent, 7 per cent, or even 10 per cent within 18 months.

The relative positions of the UK and U.S. on inflation and the budgetary outlook have been reversed in the course of this year. Now, with the U.S. economy sliding and inflation still at 4 per cent, there is the prospect of weakening prices in many U.S. production sectors. While the possibility of a dollar collapse, which could give rise to fresh inflation in the U.S., cannot be entirely ruled out, this does not seem likely to occur in the short run.

In the UK, however, the Government's fiscal and monetary policy actions through 1984 suggest that it no longer regards further reductions in the inflation rate as an imperative need. If official policy does not have lower inflation as its primary objective, the gilt market's scepticism regarding further anti-inflation progress will probably be justified.

Similarly, the relative U.S. position with regard to budget deficits has improved. The hope is that the U.S. Administration is about to propose tough measures to curb the deficit to 2 per cent of GNP by 1988. Although Congress is likely to take time fashioning a deficit-curbing package, there is now a wider political consensus than there was in the year leading up to the election that action on the budget is needed.

In the UK, on the other hand, the public sector borrowing requirement is overrunning the Government's original forecasts, which points to the unfavourable underlying trends in public sector finances. Given the UK Government's increasing sensitivity to unemployment, corrective action is unlikely to be taken to deal with these trends.

The conclusion is that there are strong grounds to expect UK yields to adjust upwards relative to U.S. yields. If U.S. yields continue to fall, this upward adjustment may well be consistent with stable or rising UK gilt prices. Nevertheless, there is likely to be considerable resistance to UK yields following U.S. yields down.

Stephen Lewis
Phillips & Drew

FT/AIBD INTERNATIONAL BOND SERVICE

U.S. DOLLAR STRAIGHTS	Issued	Price	Chg. on week	Yield
Aegon Insur. 11½ 91	50	100¾	+1⅛	11.82
AHFC O/S Fin. 11⅞ 94	100	100	+0½	11.74
All Nippon Air 14 94	100	111¼	+0½	11.94
Amer. Savng 12 89	125	100¾	+1½	11.72
Amer. Saving 12⅛ 89	100	101¼	+1⅞	11.67
Asian Dev. Bk. 11⅞ 93	100	98¾	+1¼	12.00
Australia 11⅛ 90	100	101⅛	+0⅜	10.91
Australia 11⅞ 95	200	99¾	+1	11.53
Australia 11¾ 99	100	100½	+0⅞	11.54
AIDC 11 89	100	98	+0⅜	11.61
Austria 13⅛ 92	100	108	-0⅛	11.93
Bk. America 12 87	100	100⅞	+0¼	11.48
Bk. Nova Scotia 13⅛ 87	70	103¼	+0⅞	12.08
Bank of Tokyo 11⅞ 90	100	100	+1¼	11.87
Bank of Tokyo 13⅛ 91	100	106¾	+1½	12.07
Beneficial O/S 12 91	100	98¼	+0½	12.40
Br. Col. Hydro 11⅝ 89	100	100¼	+0⅜	11.69
Br. Col. Hydro 12¾ 14	200	101½	0	12.68
Br. Col. Hydro 13⅛ 87	200	101½	0	12.66
Britoil Fin. 11⅛ 90	125	99⅞	+1⅛	11.89
CCCE 12⅜ 95	75	102½	+1½	12.12
Canada 10⅞ 89	1000	100	+1⅛	10.96
Carlo Computer 5⅞ 89	80	98¾	-6⅛	6.21
Citicorp O/S 10 96	200	98¼	+0⅜	11.17
Citicorp O/S 10⅞ 90	100	95¼	+1⅞	11.43
Citicorp O/S 11⅞ 88	100	97	+0⅜	12.50
Citicorp 11⅞ 89	100	99½	+0⅜	11.95
Citicorp 11⅞ 89	100	100½	0	11.65
Citicorp O/S 14 94	100	102	+0⅜	13.58
CNCA 13⅛ 91	125	105⅛	+1½	11.97
Coastal Int. 12⅛ 89	100	101⅞	+0⅝	11.50
Comp. Bancaire 13⅛ 90	125	104⅞	-0⅛	12.56
Comsat 12⅛ 91	100	95¼	0	13.23
Creditanstalt 12⅛ 91	100	104¼	+0⅜	12.07
Daiichi Kangyo 12⅛ 90	100	101⅛	+1	11.83
Dart & Kraft 7⅝ 98	85	93	-4⅛	8.63
Denmark 11⅜ 91	60	100	0	11.50
Denmark 12 91	100	100¼	+1⅜	11.91
Denmark 12⅝ 93	100	100⅛	+0⅝	12.13
Denmark 13 91	100	103⅜	+0⅜	12.12
Denmark 14 91	100	105⅞	+1½	12.60
Den Norske Cr. 11½ 91	50	92⅛	0	13.01
Den Norske Cr. 13⅛ 91	100	97½	+2⅛	12.33
Digital Equip. 11⅞ 89	125	101½	+1⅛	11.25
Dutch St. Mines 11⅜ 91	150	97½	+1⅛	11.93
EECO Intl. 12 91	100	96	0	12.90
Exportfinans 11⅞ 90	100	98⅞	+1	11.76
Eurofima 12⅛ 91	100	103¼	+0⅜	11.71
EEC 10¾ 89	75	91	+0⅜	12.31
EEC 11 87	350	99¾	+0⅜	11.23
EEC 11 89	75	96⅜	+0⅜	11.61
EEC 12 93	100	101⅞	+0⅜	11.72
EEC 12 93	100	97½	0	12.47
Euro. Inv. Bk. 11⅜ 90	200	99⅝	+0⅜	11.64
Euro. Inv. Bk. 11⅜ 91	100	89	0	13.76
Euro. Inv. Bk. 11⅜ 93	77	95⅞	+0½	12.79
Euro. Inv. Bk. 11⅜ 96	150	100⅛	+0⅜	11.84
Euro. Inv. Bk. 11⅝ 94	100	103⅛	+0⅜	11.52
Euro. Inv. Bk. 12⅞ 94	100	105⅜	+0⅜	11.86
EDC 11⅝ 89	100	98⅞	+0⅛	11.45
Export & Import 12⅛ 91	75	108⅝	+0⅞	11.33
Farm Cred. Cpn. 11⅜ 89	100	99⅜	+0⅛	11.78
Firstfed Mich. 13⅛ 89	125	103⅜	+1	12.27
Florida Fed. 12⅜ 89	100	102½	+1⅛	11.58
G. E. Credit 98	600	27½	+0⅜	11.76
General Elec. 5⅜ 91	100	93¾	+1⅛	11.22
Gen. Elec. Cred. 11 91	200	99⅛	+1⅛	11.18
Gen. Elec. Cred. 11 94	200	99	+0½	11.16
Gen. Motors Ac. 11⅜ 90	100	101¼	+1⅛	10.93
Gen. Motors Ac. 12⅜ 86	200	100¼	-0¼	12.50
Gen. Motors Ac. 13 86	200	101⅞	+0⅛	11.60
GZB 14 91	100	106	+0⅛	12.56
Giro Vienna 13⅛ 91	75	103¼	0	12.45
GTE Finance 12 98	75	99⅞	+0⅛	11.99
Gulf Oil 10⅛ 94	100	94⅜	+1⅛	11.21
Gulf Oil 12⅛ 87	100	102⅜	+0½	11.24
Gulf & Western 12⅛ 89	100	97½	+0½	12.88
Holl. Air. Fin. 12⅜ 91	100	98½	+0½	12.56
IBM Credit 13⅞ 87	100	103⅞	0	12.61
IBM 12⅜ 92	200	107⅞	+1⅛	10.79
IC Industries 11⅞ 98	75	96⅜	0	12.37
Ind. Bk. Japan 11⅜ 89	125	99⅜	+0⅜	11.66
Ind. Bk. Japan 11⅞ 91	100	100⅞	+1⅛	11.88
Ind. Bk. Japan 13⅞ 91	125	108⅛	+1⅛	11.98
IADB 12⅛ 93	120	102	+0⅜	12.09
Int. Bk. Rc. Dv. 11⅜ 89	200	98⅜	+0½	11.63
Int. Bk. Rc. Dv. 11⅜ 89	200	100⅛	+0⅜	11.31
Int. Bk. Rc. Dv. 12 93	200	101⅜	+0⅜	11.67
Int. Paper 12 91	75	101⅜	+1⅛	11.59
Int. Stand. Elec. 87	112	23	+0⅞	12.70
Int. Stand. Elec. 12 96	75	97	+1½	12.48
III 12 89	100	100⅞	+1⅛	11.69
Itoh 7½ 89	50	92½	-1⅛	9.62
ITT 11½ 89	125	100	-0⅛	11.50
Japan Airlines 12½ 94	70	106⅜	+0½	11.38
Japan Dev. Bk. 11⅞ 91	100	97⅛	0	12.93
Kyowa Fin. HK 12⅞ 90	100	103⅜	+2⅜	12.01
Lac Minerals 8 89	50	96⅜	-1	8.91
Long Term Cred 10⅜ 90	100	95⅜	+0⅞	11.90
Long Term Cred 11 90	100	96⅜	0	11.83
Long Term Crd. 11⅞ 89	100	100	+1⅛	11.83
Long Term Crd. 12 93	100	100½	+0⅞	11.91
Long Term Crd. 12½ 90	85	104⅜	+1½	11.41
Long Term Cred 15⅜ 89	125	106⅜	0	13.22
Macy R. H. 11⅜ 91	100	100⅜	+0⅜	11.64
McDonalds Fin. 11⅜ 94	75	99⅜	+1⅛	11.78
Metro. Tokyo 12⅞ 94	50	105⅜	-0⅛	11.90
Minebea 6⅛ 89	100	101⅞	-0⅜	5.73
Mitsubishi 5⅞ 88	100	98	+3	6.33
Mitsubishi Cp. 12½ 91	100	105⅜	+1½	11.19
Mitsub. Gas Ch. 6⅞ 89	50	96½	0	7.84
Mitsui Eng. 7⅛ 88	50	90½	+0⅜	10.32
Mitsui Tst. Fin. 12 91	100	100¼	+1	11.92
Montreal Urban 12 90	75	97⅝	+0⅜	12.87
Mgn. Guaranty 12⅜ 89	150	101⅜	+0⅜	11.71
Mount Isa Fin. 13⅜ 87	100	103⅜	+0½	11.92
Ned. Gasunie 11⅛ 90	75	98⅜	+0½	11.66
Ned. Gasunie 11⅛ 91	75	98⅜	+0⅜	11.63
Newfoundland 13 91	75	103⅜	+0⅜	12.11
Nippon Crd. Bk. 11⅞ 90	100	99⅜	+1⅛	11.93
Nippon Crd. Bk. 13⅞ 89	100	105⅞	+0⅜	12.08
Nippon Mining 6⅞ 89	50	104	0	5.67
Nippon Tel. Tel. 11⅜ 90	100	102⅜	+1⅞	10.67
Nippon Tel Tel 13 21/32 94	150	97	0	14.41
Nissho-Iwai 8⅜ 89	70	90⅜	+7½	9.29
Nomura 6⅜ 88	100	109⅜	+5⅜	3.65
Nordic Inv. Bk. 11 90	75	80⅜	0	13.51
Nordic Inv. Bk. 11⅜ 90	75	99⅜	+1	11.80
Norwest Oseas. 12⅞ 91	50	93⅜	0	13.81
Nova Scotia 11⅜ 91	100	99	+0⅜	11.97
Oester. Post. 12⅜ 89	75	100	-0⅜	12.20
Ohbayashi-Gumi 7⅜ 89	50	117⅞	+0⅜	3.28
Ontario Hydro 11⅜ 94	200	99⅜	+0⅜	11.74
Ontario Hydro 11⅜ 90	200	102	+0⅜	11.24
Ontario 12½ 94	250	104⅜	-0⅜	12.05
Pacific Gas & El. 12 91	75	100½	+1⅛	11.87
Penney J. C. 11⅞ 90	100	101⅛	+0⅞	11.58
Penney J. C. 12⅜ 91	100	103⅜	+0⅜	12.00
Philips Petrol 14 89	200	105	+0½	12.40
Post-Och Kred. 12 90	75	98⅜	+0⅜	12.46
Post-Och Kred. 13½ 87	50	103⅜	+0⅜	11.93
Prudential 10⅜ 93	150	98	+2	10.47
Prudential Ins. 12⅜ 87	150	104⅞	+0⅞	10.66
Quebec Prov. 12⅜ 93	100	100½	-1⅛	12.39
Quebec Prov. 12⅜ 94	150	101⅛	-0⅛	11.94
Quebec Prov. 13 13	100	102⅜	0	13.10
RTZ 11⅜ 93	100	94⅜	+0⅞	12.65
Rockefeller 13⅜ 89	100	104⅛	+0⅞	11.93
RBC 11½ 89	100	98⅜	+0⅜	11.86
Royal Bk. Scot. 11½ 93	75	98⅜	0	12.18
Royal Bk. Scot. 11⅞ 93	75	96⅜	+1⅛	12.62
Rural Bk. Aust. 12 91	60	97⅜	+0½	12.61
Sanwa Intl. Fin. 12⅜ 90	80	101½	+0⅜	11.83
Scot. Intl. Fin. 14⅛ 96	50	107	+2⅜	13.01
Sears O/S Fin. 98	500	20⅞	-0⅜	12.20
Sears Roebuck 10½ 91	150	96⅜	+1⅛	11.27
Sears Roebuck 11⅜ 93	150	101⅛	+0⅜	11.40
Sears Roebuck 11⅜ 91	150	100	+1	11.60
Sears Roebuck 11½ 88	125	102⅛	+1½	10.78
Sec. Pacific 11⅜ 88	100	100	+0⅜	11.74
Sec. Pacific 11⅜ 89	75	96⅜	+0½	12.63
Sec. Pacific 12 92	100	99⅜	+1⅛	12.11
Seino Trans. 6⅞ 88	50	94½	+1½	8.43
Shearson/Amex 12⅞ 94	100	100½	+2⅜	12.01
Standard Chart. 11½ 94	200	100	0	11.49
Statoil 12 88	100	102⅛	+0⅛	11.11
Statoil 13½ 89	100	107⅜	+0⅞	11.26
Sumitomo Fin. 12⅜ 91	150	103	+1⅛	12.01
Sweden 12⅜ 89	200	102⅜	+0½	11.53
Swedish Export 11½ 89	100	98⅜	+0⅜	11.91
Taiyo Kobe 12 90	100	100	+1	11.98
Texaco 10½ 90	200	98⅜	+2½	11.27
Texaco 10½ 93	200	96⅜	+1⅛	11.18
Texaco Capital 13½ 89	200	105⅜	+1⅛	11.82
Texas Instr. 11⅞ 91	150	100⅜	+1⅜	11.81
Tokai Asia 12⅜ 91	100	100⅞	+1⅛	12.02
Tokyo Electric 6½ 89	70	90⅜	-1½	9.26
Tokyo Electric 13⅜ 89	100	107⅞	+3	11.08
Toronto-Dom. 12⅜ 89	60	102	+0⅜	11.96
UBS 12⅛ 91	100	103½	-0⅛	11.48
Veba 8 93	70	115⅜	+0⅞	4.95
Warner-Lambert 10⅜ 90	100	97⅜	+1⅛	10.85
West LB 11⅞ 90	100	97⅞	-0⅛	12.42
Weyerhaeuser 11⅜ 90	60	99⅜	+2	11.71
Yasuda Trust 12⅛ 89	100	101⅛	+0⅞	11.90

FLOATING RATE NOTES	Issued	Price	Chg. on week	C.cpn
Allied Irish ¼ 92	100	100⅛	+0⅛	11⅛
Allied Irish ⅛ 95	100	99½	0	12 5/16
Arab Bank Cpn. ⅛ 96	100	100	0	12¼
Oster. Lnbk. ⅛ 99	100	99⅞	0	11 21/32
BAII ¼ 91	50	99	-0⅛	12
Banca Lavoro ⅛ 91	100	100⅛	0	10 9/16
Banca Naz D.A. ¼ 91	75	100¼	+0⅛	12⅞
Banco Napoli ⅛ 95	100	100½	+0⅛	10 9/16
Banco di Roma ¼ 90	75	100⅛	-0⅛	12 5/16
Banco Hispano ⅛ 95	100	100⅛	+0⅛	11 1/16
BCCI ¼ 90	60	99⅜	+0⅛	12⅜
Bankers Tr. NY. ⅛ 96	200	100⅛	0	9⅞
Bank of Helsinki ⅛ 99	60	99⅜	0	11 21/32
Bank of Greece ⅛ 94	150	98⅛	0	11 21/32
Bank Montreal ⅛ 96	250	100⅛	0	10⅛
Bank of New York ⅛ 96	75	99⅞	0	11 5/16
Bqe. Dev. Econ. ⅛ 90	60	96⅞	+0⅛	12 11/16
Bqe. I'Indosuez ¼ 99	150	100⅛	+0⅛	12 5/16
Bqe. Nat. Paris ⅛ 88	400	100⅞	-0⅛	12½
Bqe. Nat. Paris ¼ 95	400	100⅜	0	12⅛
Barclays O/S ⅛ 04	350	100⅛	0	12 5/16
BBL ⅛ 99	100	99⅞	-0⅛	11 11/16
Belgium ⅛ 94 £	100	99⅜	0	10 7/16
Belgium ⅛ 04	400	100⅛	0	13⅛
BFG Finance ⅛ 96	100	99½	0	12⅛
Credit Commerce ¼ 98	125	100⅛	0	12
CEPME ½ 89	145	99⅛	0	12 5/16
CEPME ⅛ 96 £	100	99⅜	-0⅛	11⅞
Citicorp O/S ⅛ 91 £	100	99⅜	0	10
Caisse Nat. Tel. ⅛ 90	275	100⅛	0	11 5/16
Caisse Nat. Tel. ⅛ 91	250	100½	0	10⅛
Commerzbank ⅛ 89	100	100⅛	+0½	9 11/16
Creditanstalt ⅛ 94	125	100½	0	13 5/16
Creditanstalt ⅛ 96	150	100⅛	0	12 5/16
Credit Commerc. ⅛ 96	250	100⅛	0	12⅛
Credit Foncier ¼ 93	500	100⅛	-0⅛	12
Credit Lyonn. ⅛ 96	300	100⅛	0	12⅜
Credit Lyonnais ⅛ 96	250	100⅛	0	12⅛
Credit National ⅛ 95 £	100	99⅞	-0⅛	11
Dai-Ichi Kngyo ⅛ 89	150	100	0	10 5/16
Dansk Olie ⅛ 99	100	100	+0⅛	10 5/16
Denmark ⅛ 98 £	100	100	0	10
Denmark 3/16 90	500	100⅛	0	11⅛
Denmark 3/16 04	500	100⅛	+0⅛	10⅛
Denmark ⅛	600	100⅛	+0⅛	12⅛
Dresdner Bank ⅛ 93	400	102⅜	+1⅛	11½
Dresdner Bank 0 89	350	99⅞	+0⅛	9 11/16
EAB Finance ⅛ 93	75	100	0	12⅛
Eldorado Nuke 0 89	100	100⅛	+0⅛	12⅛
Elec. de France ⅛ 99	400	100⅛	0	12⅛
ENEL ⅛ 93 £	100	99⅜	-0⅛	11⅛
Equitable O/S ⅛ 94	50	98⅜	0	11⅛
Exterior Intl. ⅛ 96	125	99⅞	0	10 11/16
Ferro. del. Stat. ⅛ 99	250	100⅛	0	12⅛
Fiat Finance ⅛ 94	100	98⅜	+0⅛	12
First Aust. Bk. ⅛ 92	50	99⅞	0	12 21/32
First Interstate ⅛ 95	150	99⅞	+0⅛	12⅛
Fuji Bk. ⅛ 96	200	100⅛	0	12⅞
Genfinance ⅛ 94	100	100½	0	12⅞
GZB ⅛ 96	50	100	0	9 11/16
Gotabanken ⅛ 94	50	99⅜	+0⅛	10⅛
GW O/S Fin. ⅛ 94	100	99⅜	+0⅛	12
Grindlays ⅛ 94	100	100⅛	0	12½
Indonesia ⅛ 93	250	98	0	12
INI Perpet. 3/16 00	150	99⅞	0	11 15/16
Interfirst Tex ⅛ 89	100	97	+1⅛	9⅞
Int Bk Rec Dev 1/16 89	250	98⅜	-1⅛	11⅛
Ireland ⅛ 93 £	50	100	0	10⅛
Ireland 3/16 94	300	100⅛	0	13⅛
Italian Intl. ⅛ 91	60	99⅞	0	13
Italy ⅛ 99	500	100⅛	0	12⅛
Kansallis-Osak ⅛ 92	100	100½	0	12½
Kleinwort Ben. ⅛ 96	100	100⅛	0	12 5/16
Kone Corp. ⅛ 94	50	99⅜	+0⅛	12 5/16
Korea Exch. Bk. ¼ 93	50	99⅜	0	12⅛
Lloyds Eurofin ⅛ 92	100	100⅛	0	12⅛
Lloyds Eurofin ⅛ 93	200	100⅛	0	10 21/32
Lloyds Bank ⅛ 04	250	100	0	11½
Malaysia ⅛ 93	850	100½	0	12 7/16
Megal Fin. 3/16 94 CU	100	99⅞	0	9 15/16
Midland Intl. ⅛ 89	125	100⅞	0	12⅛
Midland Intl. 0 91	150	100⅛	0	11
Midland Intl. ⅛ 99	200	100⅛	0	12⅛
Mitsui Fin. ⅛ 96	100	100⅛	+0⅛	12 5/16
Montreal Urban 0 91	150	100	-0⅛	12 5/16
Morgan Grenfell ⅛ 94	50	99⅜	-0⅛	13 5/16
Morgan J. P. Intl. ⅛ 97	250	100⅞	+0⅛	9 5/16
Mtge Bk Denmark ⅛ 93	150	100⅞	0	12 11/16
Mtg Bk Dnmrk 3/16 94 £	50	100	0	10⅛
Mtge Bk Denmark ⅛ 99	125	100	0	11⅞
Nat. Bk. Canada ⅛ 91	50	100	0	13⅛
Nat. Bk. Canada ⅛ 91	50	100⅛	0	13 5/16
Nat. West. Bank ⅛ 90	150	100⅛	0	12⅞
Nat. West. Fin. ⅛	365	100½	+0⅛	10⅛
Neste Oy ⅛ 94	100	100⅛	-0⅛	12⅛
Oko Bank ⅛ 92	50	99⅜	-0⅛	12⅛
Pirelli Fin. ⅛ 94	50	98⅛	+0⅛	12½
Portugal ⅛ 92	100	98½	0	12
Quebec Hydro ⅛ 94	200	100⅛	0	12⅞
Queensld. Coal ⅛ 96	365	100⅛	0	10 5/16
Queensld. Coal ⅛ 85	46	100⅛	-0⅛	10 5/16
Renfe ⅛ 91	100	100⅛	0	12⅛
Saitama Intl. ⅛ 93	60	100⅛	-0⅛	12 21/32
Sanwa Intl. ⅛ 92	150	100⅛	0	12⅛
Sanwa Bk. ⅛ 04	150	100½	0	12⅞
Scandiwa. Fin. ⅛ 93	70	99⅞	+0½	12 5/16
Scot. Intl. Fin. ⅛ 92	100	100½	0	11 11/16
SEAT ⅛ 93	100	99⅜	0	12⅛
Skopbank ⅛ 94	75	99½	0	13
SNCF ⅛ 93 £	75	100½	0	10 21/32
Soc. Generale ⅛ 91	125	100⅛	0	13 5/16
Soc. Generale ⅛ 94	250	100⅛	+0⅛	12 5/16
Spain ⅛ 97	250	100⅛	0	12⅛
Standard Chart. ⅛ 91	100	100⅛	0	10⅛
Standard Chart. ⅛ 94	200	100½	0	13
Sumitomo Tst. ⅛ 94	100	100⅛	0	12 7/16
Sweden ⅛ 03	1bn	100⅛	0	10 5/16
Sweden ⅛ 24	500	99⅜	-0⅛	11 13/16
Sweden ⅛	750	100⅛	+0⅛	13⅛
Taiyo Kobe F. ⅛ 04	100	100	0	10 5/16
Thailand ⅛ 00	85	100	0	12 15/16
Tokai Asia ⅛ 99	150	100⅛	+0⅛	12½
Toyo Tst. Asia ⅛ 98	100	100⅛	0	12⅛
TVO Power ⅛ 04	100	98½	+0⅛	10 5/16
Union Bank-Norw. ⅛ 89	50	99½	0	12 5/16
Vizcaya Intl. ⅛ 98	75	100⅛	+0⅛	10½
Wells Fargo 3/16 98	50	99⅛	-0⅛	9⅞
Yokohama Asia ⅛ 94	100	100⅛	+0⅛	11⅛
Yorkshire Int. ⅛ 94 £	75	99⅜	-0⅛	11 5/16

CONVERTIBLE BONDS	Issued	Price	Chg. on week	Prem.
Ajinomoto 3 99	120	97⅞	-1	
BBC Brown Bov 4⅛ 95	57	88⅛	+0⅛	8.89
Comsat Intnl. 7⅛ 98	110	78⅜	+3⅛	64.76
Daiwa Secs. 5½ 98	60	121⅜	+4⅛	0.74
Dev. Bk. Sing. 5½ 98	70	80	0	13.87
Elders 11½ 94	160	107	-2	58.14
Elektrowatt 5 98	52	78⅜	+0⅛	7.53
Fanuc 3⅛ 98	80	156⅛	-0⅛	4.25
Fujitsu 3 99	180	101⅛	-1⅛	5.64
Intec. Inc. 3 99	80	81⅛	-7	0.16
Konishiroku 4 98	50	84⅛	+1	6.05
Man. Hanover 11⅛ 96	100	98⅛	0	
Mitsubishi H. 4⅛ 99	100	94½	+2⅛	4.81
Moet-Hennessy 7 99	90	101⅛	-0⅞	9.12
Murata Mfg. 3½ 99	100	106⅛	-7⅛	2.01
Murata Mfg. 3½ 00	100	100⅛	-4	0.32
Nippon Oil 3⅛ 99	50	88⅛	-3⅛	7.59
Ono Phrm. 3⅛ 98	60	125½	+3⅛	-1.16
Sekisui 3 99	50	80⅛	+1⅛	1.66
Soc. Gen. Surv. 4½ 94	61	85	0	148.66
Sumitomo Corp. 2⅞ 99	70	88⅛	+4⅛	-0.98
Texaco Capital 11⅛ 94	1bn	100⅛	0	48.70
Texaco Capital 11⅛ 94	500	99⅞	+0⅛	47.98
Usair Finance 7 98	50	99½	+1⅛	10.16
Yamanouchi 4 90	50	118½	-14⅛	-0.73

YEN STRAIGHTS	Issued	Price	Chg. on week	Yield
Asian Dev. Bk. 7⅜ 94	15	100⅛	+0⅛	7.29
IADB 7⅜ 93	15	103⅛	+0⅞	7.38
New Zealand 7⅜ 90	15	100⅞	+0⅞	6.98
World Bank 7 94	20	98⅛	-1	7.20
World Bank 7⅜ 93	20	102⅞	+1½	7.18

LUXFR STRAIGHTS	Issued	Price	Chg. on week	Yield
E. Coal & Steel 10½ 94	1bn	101⅛	+0⅛	10.14
Euro. Invst. Bk. 10½ 94	1bn	101½	+0⅛	10.18
Int. Bk. Rc. Dv. 10⅛ 89	1bn	102⅛	+⅛	9.58

GUILDER STRAIGHTS	Issued	Price	Chg. on week	Yield
ABN 8 89	200	102½	+0⅛	7.27
Aegon Insur. 8⅛ 89	100	104½	+½	7.05
Amro Bank 8 89	200	102⅛	0	7.32
Amro Bank 8⅛ 88	100	104⅞	+0⅛	7.25
Bk. Mees&Hope 8⅛ 89	100	103⅛	+0⅛	7.32
Beatrice Foods 8⅛ 89	100	101⅛	+0⅛	7.90
C. C. Rabo 8 89	150	102⅛	+0⅛	7.33
C. C. Rabo 9 88	100	105⅛	+⅛	7.41
Denmark 8½ 91	100	102⅛	+0⅛	7.95
Int. Bk. Rec. Dv. 8⅛ 89	150	103⅛	+0½	7.35
Int. Stand. Elec. 8½ 89	100	103½	+0⅛	7.49
Ned. Midd. Bank 9 88	100	105⅛	+0⅛	7.25
New Zealand 8½ 89	100	103⅛	+0½	7.25

CANADIAN DOLLAR STRAIGHTS	Issued	Price	Chg. on week	Yield
Br Col Prov 12 93	100	101⅛	+1⅞	11.77
Bqe l'Indosuez 14 91	75	105½	+0⅛	12.71
Br Col Munic 13½ 91	100	105½	+1⅛	12.20
Br Col Tele 12⅛ 89	70	101	+1⅛	12.08
Farm Cred Corp 12⅛ 90	75	104½	+0½	11.14
Int Bk Rec Dev 12⅛ 90	75	104½	+0⅛	11.15
Montreal City 12⅜ 91	70	101½	+0⅛	12.11
Quebec Hydro 14 91	75	107⅛	+0½	12.28

ECU STRAIGHTS	Issued	Price	Chg. on week	Yield
Australia & NZ 10⅜ 91	50	100⅛	+0⅛	10.58
Oesterreich 10⅜ 93	100	102⅞	+0⅞	10.09
Cred National 11½ 91	50	105½	+0⅛	10.12
Denmark 10⅜ 91	75	101⅛	+⅛	10.33
Ebco Intl 10⅞ 89	55	101⅛	+0⅛	10.33
EEC 10½ 91	60	101	+0⅛	10.25
EEC 11 93	50	104½	+0⅛	9.92
EEC 11⅛ 91	50	104⅛	+0⅛	10.27
EEC 11⅛ 93	70	106⅞	-0⅛	10.11
Eur. Coal&Steel 6 94	60	99⅛	0	11.10
Euro Invest Bk 10⅜ 89	50	103⅞	0	9.43
Euro Invest Bk 10⅜ 94	100	102	+0⅛	10.26
Euro. Invest Bk. 11⅛ 92	75	104⅛	+0⅛	10.17
Euro. Inv. Bk. 11⅛ 93	50	105⅞	+0⅛	10.09
Euro. Invest Bk 11⅛ 96	50	102⅞	-0½	10.78
Gen. Finance 11 90	70	103⅛	+0⅛	10.24
Gte Finance 10⅞ 92	50	102½	+0½	10.35
Int. Bk. Rc. Dv. 10⅜ 88	100	103	+0⅛	9.68
Int. Bk. Rec. Dv. 11 93	50	104⅞	-0⅛	10.15
Italian Treas. 11½ 90	60	103⅛	+0⅛	10.74
Megal Finance 11⅛ 94	100	101⅞	+0½	10.90
Nippon Cred. Bk. 11 91	50	102⅞	+0½	10.31
Nordic Inv. Bk. 8 94	50	95⅛	-2½	11.40
Post Och Kred. 10⅞ 92	50	100⅛	+0⅞	10.82
Royal Bk Can 10½ 89	85	100⅛	+0⅛	10.28
SNCI 10⅞ 94	60	102⅛	+0⅛	10.49
Swedish Export 11 89	58	103⅞	+½	9.86
WestLB 10⅞ 91	50	103⅞	0	9.99

AUSTRALIAN DOLLAR STRAIGHTS	Issued	Price	Chg. on week	Yield
AIDC 12⅛ 90	42	98⅛	+1½	12.61
Nat Aust Bk 12½ 89	40	97⅜	-0⅛	13.19
PIBA 13⅜ 88	40	101⅞	0	12.97
PIBA 12⅜ 89	50	97⅛	-0⅛	13.20
State Bk NSW 12⅛ 89	40	98⅛	-0⅛	12.59

STERLING STRAIGHTS	Issued	Price	Chg. on week	Yield
Europarat 11⅛ 92	50	100	+0⅛	11.35
Denmark 10⅜ 89	75	98	-0⅛	11.32
EEC 11⅛ 94	50	101⅛	-0⅛	11.11
EEC 11⅞ 93	50	103⅛	0	11.24
Euro. Invest Bk. 10⅜ 92	75	97⅛	-0⅛	11.33
FFI 10⅜ 93	50	97⅞	0	11.13
Finland 11⅞ 88	50	102⅞	-0⅛	10.88
I.A.D.B. 11⅜ 91	60	100⅛	+⅛	11.29
Int. Bk Rec Dev 10⅜ 88	100	98⅛	-0⅛	11.07
Int. Stand Elec. 11⅜ 88	50	100⅞	+0⅛	10.83
Inv. In Indust. 10½ 91	50	95½	0	11.56
Inv. In Indust. 11½ 91	50	103½	+0⅞	10.76
Ireland 11⅛ 94	50	98	0	11.71
New Zealand 10⅜ 89	100	97⅞	-0⅛	11.22
SNCF 11⅛ 94	60	99⅜	-0⅛	11.29
SNCF 11½ 89	30	102⅛	+0⅛	10.91

EQUITY WARRANTS	Expiry date	Price	Chg. on week	Prem.
BASF Overzee	29/2/88	64	0	113.35
Bayer Int. DM	1/7/87	86	0	112.01
Bayer Int. DM	28/2/89	76	0	114.72
Ciba-Geigy Int. £	1/11/93	162½	-7½	109.00
Com. Fin Deut. DM	31/5/87	143	0	87.85
C. Itoh	20/1/87	37⅛	+0⅛	
C. Itoh DM	4/5/89	10⅞	0	407.85
Credit Suisse	31/5/88	19½	+1	97.81
Degussa Int. DM	2/5/93	156½	+2	133.32
Deutsche Bank DM	18/6/91	151⅛	+0½	127.29
Dresdner Fin DM	1/9/92	0		
Dresdner DM	19/10/93	64	0	124.87
Hoechst DM	1/2/93	87	0	108.20
ICI Finance	1/6/90	228⅛	-1⅛	
IC Industries	15/6/88	10⅛	-0⅛	218.55
Int. Pirelli	14/6/88	14½	0	116.89
Minebea Co.	20/2/89	22⅛	-1	957.54
Mitsubishi Ch.	20/1/87	22⅛	+3½	
Mitsubishi Cp.	7/11/88	18⅛	+2	971.12
Mitsui	10/12/87	17	+1	
Nippon Mining	17/3/89	60½	-18	
Nisho Iwai	1/2/89	10⅛	+0½	
Nomura Sec.	31/10/88	27⅞	+4	943.93
Omron Tateisi	31/3/89	18⅞	-0⅛	335.14
Philips Gloeil	15/7/88	15	+1	203.41
Prudential O/S	15/12/88	95	0	914.09
Renown	24/1/89	8	+0⅛	427.53
Schering DM	12/9/90	130	0	115.11
Seagram Comp.	15/9/88	10⅛	0	103.47
Seino Trans	17/3/88	13⅛	+0⅛	438.44
Seiyu Stores	20/3/87	55	0	
Siemens Wstn DM	31/5/90	236⅛	-0⅛	109.00
Sumitomo Cons.	24/3/89	41½	-0½	
Sumitomo Heavy	24/2/89	11	-2	
Swiss Bk. Corp.	20/12/88	27⅛	+2½	119.71
Tokyo El. Pwr.	14/3/89	11⅛	-1⅛	339.90
Toray Ind.	5/3/87	11⅛	-0⅛	762.79
Vebe Int.	15/12/93	56⅜	+0⅛	129.86

BOND WARRANTS	Expiry date	Price	Chg. on week	Ex. yield
Aegon Ins 11⅛ 91	14/2/88	15½	-0⅛	8.18
CCCE 11½ 89	15/12/84	1	0	11.42
CEPME 10 93	4/3/85	1	0	12.36
Commerzbk 11⅛ 89	17/7/88	40½	+16½	3.13
Creditanstalt 14 91	31/7/86	48	-18	5.64
Denmark 11½ 93	15/12/88	40	-7⅛	5.71
D. Norsk Cr 11⅛ 91	1/2/88	11½	-0½	10.27
Dv Bk Sing 14⅛ 89	12/9/86	66	+0⅛	1.41
Du Pont 13⅛ 89	26/8/88	47½	-1⅞	1.67
Eksportfinas 13⅛ 89	15/9/87	44⅛	-0⅛	2.97
G Elec Cred 11 94	17/12/89	1	0	10.94
Gen Elec 12⅛ 91	7/8/87	44⅞	0	4.76
H'sebold Fin 11⅛ 90	1/12/88	7⅛	0	9.83
IBM Credit 13 87	19/8/85	43⅞	+0⅛	-3.69
Inv In Inds 10½ 91	1/12/88	65	+2	0.67
M. Hanover 13⅛ 87	1/9/85	25⅛	+3⅛	2.73
McDonlds F 11⅛ 94	5/1/89	29⅛	-5⅛	8.70
Morgan J.P. 10⅜ 90	16/8/87	17½	-0⅛	8.19
Nordic Inv Bk 11 90	15/11/87	14⅛	-1½	9.67
Oester Lnbk 13½ 89	9/8/87	44½	-2	2.12
Penney J.C. 10⅜ 90	15/10/87	15⅞	+0½	7.26
Post-O Kred 11⅛ 90	15/11/87	10½	-1	9.56
Ryl B Scot 11½ 93	15/11/88	20	-1½	8.78
Std Chart 11½ 94	6/1/85	1	-1½	11.31
Texaco 10½ 93	15/11/87	15⅛	-1⅛	8.70
Thmsn-Brdt 13⅛ 91	29/8/88	39⅛	-1½	6.84
Weyerhaeuser 11 90	15/11/87	14⅛	-1⅛	8.46
Xerox 13⅛ 87	15/8/85	26½	-4	1.82

STRAIGHT BONDS: Yield to redemption of the mid-price. Amount issued is expressed in millions of currency units except for yen bonds, where it is in billions.

FLOATING RATE NOTES: U.S. dollars unless indicated. Margin above six-month offered rate (‡ three-month; § above mean rate) for U.S. dollars. C.cpn=current coupon.

CONVERTIBLE BONDS: U.S. dollars unless indicated. Prem=percentage premium of the current effective price of buying shares via the bond over the most recent share price.

WARRANTS: Equity warrant prem=exercise premium over current share price. Bond warrant ex yld=exercise yield at current warrant price.

Closing prices on November 30

INTERNATIONAL CAPITAL MARKETS AND COMPANIES

CORPORATE FINANCE

Saint Gobain shows strength of the Ecu

THE EUROPEAN currency unit has been increasingly hitting the headlines as a financial tool for bankers, borrowers and money dealers. One man who believes that the Ecu, having established itself as a unit of value on international financial markets, is now moving towards use as a transaction currency in commercial operations is M Jacques Pillet, treasurer at Saint Gobain.

M Pillet should know. Saint Gobain, *the French state-owned* conglomerate with activities ranging from glass-making to pipes and construction, has been one of the pioneers in promoting use of the Ecu in the corporate treasuray field.

Saint Gobain, with only 34 per cent of its roughly FFr60bn turnover actually in France (15 per cent represents exports from France and 51 per cent sales by foreign production units), has been long-exposed to the blustery winds of exchange rate fluctuations.

As part of a drive to bring in an internal accounting system resistent to undue changes in exchange rates, the company in 1981 started to denominate internal group transactions in Ecu. In 1983, in line with the growth of Ecu trading facilities available from the banks, it started to use the Ecu as a transaction currency.

Now the time may have arrived for more outside clients of Saint Gobain to start using the Ecu, too. The group's annual Ecu transactions currently total only around FFr 500m, mostly representing sales and purchases by subsidiaries.

But judging by the interest now being shown by other companies—at first slow to change their habits—FFr 1bn-1.5bn of Saint Gobain's business next year could be denominated and settled in Ecus, Mr Pillet says. "1984 has been the most important year for the use of the Ecu in financial operations; 1985 could be the year when it makes an impact in the commercial field, too."

Important state clients—such as East bloc and Middle East countries—are also developing more interest in Ecu deals, he says.

Saint Gobain's use of the Ecu on the financial markets has accompanied the gradual winning of acceptance of the unit as a way to denominate bond issues and credit deals over the last few years. Including an Ecu issue of non-voting loan stock (*titres participatifs*) earlier this year, the company now has Ecu 250m in Ecu bonds or outstanding, plus an additional Ecu 100m which could be subscribed in the future as a result of warrants attached to existing issues.

Adding several hundreds of millions of Ecus in outstanding credit lines with banks, Ecu borrowing makes up about half the group's foreign debts.

M Pillet, who is also chairman of the French corporate treasurers' association, says that the Ecu now holds its own in currency trading alongside dollars, D-marks and sterling. As a mark of sophistication, four- to five-year cover in Ecus is available on the forward market, he says.

Whereas in 1982 or 1983 Ecu trading was relatively limited, Saint Gobain now feels happy dealing in Ecus with all the major French, Swiss, British, Belgian and West German banks (the latter through their Luxembourg outlets, since the Bundesbank still rules out use of the Ecu on the German financial market).

M Pillet is a former currency dealer with Banque Indosuez, which he left 14 years ago. He has been pushing, through the treasurers' association, for more freedom in corporate financial management, where French companies are still heavily constrained by exchange controls.

Although Saint Gobain is allowed relative flexibility as one of France's largest trading corporations, it still feels hamstrung by overall restrictions which prevent importers buying foreign currency to cover purchases from abroad.

David Marsh

Bayerische Hypotheken earnings improve

By Jonathan Carr in Frankfurt

THE Bayerische Hypotheken und Wechselbank of Munich has joined other leading West German banks in reporting an earnings improvement since mid-year.

The Hypo-Bank said its partial operating profit, which includes interest and commission earnings less personal and other expenses, was down by 9.5 per cent in the first 10 months to DM 593m ($190.6m). In the first half the cut had been 14 per cent.

The interest surplus in the first 10 months dropped by 3.3 per cent to DM 1.2bn, while the commissions surplus rose by 8.3 per cent to DM 179.5m.

The bank did not specify its full operating profit, which includes the results of trading on its own account. It expected a "satisfactory result" for the year as a whole, however.

● Berliner Handels und Frankfurter Bank has announced partial operating profit, excluding trading results, of DM 101m in the first 10 months against DM 99m for the same period in 1983.

The interest surplus for the 10 months was marginally higher at DM 183m from DM 175m in 1983, and commission surplus rose by DM 1m to DM 84m.

INTERNATIONAL APPOINTMENTS

Board sackings for Continental Illinois

BY WILLIAM HALL IN NEW YORK

THE Federal Deposit Insurance Corporation (FDIC), which rescued CONTINENTAL ILLINOIS from near failure earlier this year, is sacking more than half of the board of the troubled Chicago Bank. Continental is expected to announce shortly that most of its directors will not stand for re-election at next year's annual meeting.

Continental's board of directors has always been one of the most prestigeous of any company in the mid west. Mr James Bere, chairman and chief executive of Borg-Warner, Mr Robert Malott, chairman of FMC, and Mr William Johnson, chairman and chief executive of IC Industries, are among those who will not seek re-election to the Continental board.

When the FDIC rescued Continental last summer it replaced the bank's two senior executives and said that the board would be substantially restructured as soon as possible. It asked all board members to tender undated resignations.

The banking community *had* expected a new board to be appointed as soon as possible, but it is understood that the new management team at Continental, headed by Mr John Swearingen and Mr Bill Ogden, have been opposed to the sweeping reorganisation of the bank's board because they will find it hard to find replacements of the same calibre.

Singapore trading group closes doors

By Chris Sherwell in Singapore

CHOP HOO THYE, a long-established Singapore trading company best known for its line in canned abalone, has closed its doors and owes an estimated S$100m (U.S.$46m)) to local and foreign banks.

The family-run company stopped trading on Friday in what bankers are calling the biggest crash of a private business since Lee Wah Cane Furniture, another local group, collapsed last year, owing about S$50m to two dozen banks.

The affair has raised questions about the way local banks indulge in "name lending" to customers on the basis of personal guarantees, and has drawn attention to the ease with which borrowers can tap several banks independently for large sums of money. Inevitably it has also quickly revived calls for the establishment of a central credit information bureau in Singapore.

The company is an import export concern, dealing mainly in canned food stuffs. Its warehouse and offices shut on Friday after bank creditors were sent letters saying their loans could not be repaid. The reasons behind the apparent collapse are not clear, and the names of the banks involved have not been confirmed.

Restructuring at Neue Heimat

BY RUPERT CORNWELL IN BONN

A SWEEPING restructuring has been unveiled at Neue Heimat, the long-troubled West German property group — largely to help its development subsidiary, Neue Heimat Stadtebau (NHS), cope with further estimated losses of between DM 80m and DM 100m ($32m) for 1984.

The deficit follows one of DM 125m run up in 1983, and comes on top of the total of some DM 1bn which the West German trade union movement, as ultimate owner of Neue Heimat, is reckoned to have had to pump into NHS between 1981 and 1983.

At the same time NHS is being converted from a limited liability into a joint stock corporation. This will enable the 1984 losses to be covered by a capital increase and subsequent capital writedown.

The main source of the financial difficulties of the concern, which in 1982 blew up into a scandal deeply embarrassing the German union movement, remain its overseas operations, in particular in Latin America. However, costly NHS developments in Paris and Monte Carlo have now been sold, easing its financial position.

Meanwhile, the 17 member unions of the DGB, the main union confederation here, have withdrawn as direct shareholders of Neue Heimat Gruppe, the parent concern. Their previous 41 per cent stake in the DM 60m capital of NHG will be transferred to the union's joint holding company, BGAG, in the process lifting the latter's holding in NHG to 98 per cent.

Shipowners count cost of Irish collapse

By Andrew Fisher, Shipping Correspondent

THE COLLAPSE of Irish Shipping, the state-owned company for which liquidation proceedings start today, could lead to losses of more than $100m in future charter payments for Far Eastern shipowners, said Mr Frank Chao, president of the Wah Kwong shipping company in Hong Kong.

He returned to the colony at the weekend, after three days of talks in Dublin to try to put together a rescue package. However, Mr Jim Mitchell, Ireland's Minister for Communications, declined to see Mr Chao and other delegates.

Mr Chao said on Saturday that the five Asian companies which chartered nine vessels to Irish Shipping had offered to accept only I£37.5m ($37.9m) in place of the charters, which were due to stretch up to eight years. Legal action was being considered if an amicable deal could not be reached.

The Irish Government estimated that continuation of the charters of seven of the bulk carrier vessels — two were bought by Irish shipping earlier this year for $42m — would have cost about I£56.5m, representing the difference between the ship's present charter rates and the now lower market rates.

Storage Tech plans to tap finance arm

BY LOUISE KEHOE IN SAN FRANCISCO

STORAGE TECHNOLOGY, the U.S. computer equipment manufacturer which filed for Chapter 11 of the U.S. Bankruptcy Code in October, has proposed a new reorganisation plan designed to give it a cash infusion of $140m. The plan follows cancellation of a $150m credit line from Chemical Bank.

The new proposal comes amid unconfirmed reports in the U.S. suggesting that Storage Technology may receive an unexpected boost from its major competitor, IBM. Industry reports suggest that IBM has placed a large order with Storage Technology for its data storage products.

Neither company will comment on the reported purchases. IBM confirmes, however, that its own rival data storage units are in short supply and that it has taken steps to increase shipments to customers.

Under Storage's latest rescue proposal, it has asked the bankruptcy court to approve a plan under which the parent company would borrow assets from its financing subsidiary Storage Technology Finance.

The parent company said these assets consisted of about $80m in customer accounts and notes receivable plus potential claims by the subsidiary to another $60m of receivables in the parent company.

In exchange, the subsidiary will receive a superiority claim of up to $140m against Storage Technology.

This will effectively secure the loans of Storage Technology's banks, which are owed more than $111m by the finance subsidiary. The banks are understood to have been involved in working out the plan.

Beijer lifts stake in Fermenta

By David Brown in Stockholm

INVESTMENT AB Beijer, the Swedish investment company, will buy 200,000 shares and increase its stake to 5.7 per cent in Fermenta, the rapid growing Swedish biotechnology and fine chemicals company, for an unspecified sum.

Fermenta is one of the main biotechnology companies in Scandinavia, producing base penicillin (in which it accounts for 10 per cent of the world market) and other antibiotics.

The group expected sales of SKr 400m ($45m) this year

Governor at Bank of Japan

By Our Financial Staff

Mr Satoshi Sumita has been named successor to Mr Haruo Maekawa as Governor of the BANK OF JAPAN. Mr Sumita, whose appointment to leadership of the central bank was foreshadowed in September, when Mr Maekawa announced that he was to step down, will take office on December 17, after formal Cabinet confirmation

He has been Deputy-Governor since 1979.

Mr Yasushi Mieno, currently a central bank director, is to take up the Deputy-Governor's post.

President for Fiat France

By Our Milan Staff

Sig Giorgio Frasca has been appointed the president of FIAT FRANCE, following the recent resignation of Sig Vittorino Chiusano. Sig Frasca has since 1980 been the vice-president and director-general of the French offshoot of the Italian motor company.

Sig Chiusano, who had been with Fiat for 30 years and was also the Turin-based group's director for European Community relations, resigned to devote himself full-time to his work as a member of the European Parliament

Avesta brings in new chairman

BY DAVID BROWN IN STOCKHOLM

AVESTA, the troubled, Swedish stainless steel concern, has appointed Mr Gunnar Engman as working chairman to replace Mr Sten Wikander, in an attempt to "strengthen and intensify" its restructuring effort.

Mr Wikander, who is also president of the Fourth National Pension Fund, has been involved in controversy with executives of A. Johnson and Co, the Swedish industrial and trading group which owns Avesta.

Avesta was formed during the broad-ranging restructuring of the Swedish stainless steel industry. A public share offering failed badly following a sharp downward revision by Mr Wikander of his 1984 profits forecast, which had been printed in the prospectus.

Mr Engman, 55, is leaving the Billerud Forest products concern—which was taken over two months ago by Stora Kopparberg, a rival, Swedish forest products concern—where he spent six years as managing director. Under a simultaneously announced restructuring of the forest products group, Mr Engman will remain as non-executive chairman of a newly formed pulp division.

UK COMPANY NEWS

John Moore on the start of an international broker-dealing venture

Rowak's drive for global trading

THIS MORNING, in a smart office complex near Broad Street station, one of the most ambitious alliances formed in the financial services upheaval in London will start a new bid to compete internationally with powerful overseas rivals.

S. G. Warburg, the merchant bank, Rowe & Pitman, the stockbroker and Akroyd & Smithers, the stockjobber, as part of a grand plan to merge their businesses with Mullens the stockbroker, have formed a new company, Rowak. This combines the international equity-related research, distribution and trading activities of Akroyd and Rowe & Pitman. Rowak will have £17m of capital, and starts trading today.

In effect the new operation represents the UK's first major international broker-dealing venture and an indication of the shape of things to come in the British securities market.

The formation of the international broker-dealer is the result of the Stock Exchange's relaxation of its rules last year for trading in overseas equities and further hard lobbying by Akroyd and Rowe & Pitman, and others in the market, with the Stock Exchange authorities. Originally, the Stock Exchange had said that its member firms could form international dealing subsidiaries which could only trade as principals or market makers. This was designed to minimise conflicts of interest.

While the rule change gave the brokers a recognised principal's role and more flexibility for the jobbers to deal with the ultimate customer for a foreign stock, it did not put international dealing operations of British firms on an equal footing with their overseas rivals.

In October this year the Stock Exchange finally yielded to the pressure within the market and allowed the international dealing subsidiaries to act as both principal and agent, foreshadowing the eventual structure of the British securities market.

At Rowak, the senior management are excited by the possibilities of competing for the £40bn of turnover in a year which is by-passing the Stock Exchange and providing a good living for the 100 foreign securities firms in London.

The Rowak team is led by Mr David Brooke, a 46-year-old senior Rowe & Pitman man who has been associated with the development of overseas business. Mr Brooke says that its main dealing aim is to act as an agent but will, as appropriate, act as principal.

The law of agency in the UK, he argues, is unclear. "But we are totally disclosing in what capacity we are acting and separate documentation on deals will be required, and money will be segregated." There will be two settlement systems to deal with agency and principal work.

Mr Stephen Raven, an Akroyd man, says: "I think that the traditional strengths of Rowe & Pitman perhaps have not fulfilled the customer's desires completely. While they have superb research and sales and distribution, they probably in the overseas market have lost a bit of their business to the Merrill Lynches of this world because they have not been able to deal. The other side of the coin: at Akroyd & Smithers, who have been able to make markets in foreign securities, have not actually been able to break through into institutional business because we have not had the research or distribution capabilities. Now for the first time we are linking those two together. We can give as good a service as Merrill Lynch."

But will institutions prefer Rowak over the big U.S. securities houses for dealing in American stocks where local knowledge and wide dealing flexibility often put UK firms at a competitive disadvantage? Mr David Russell, another member of the Rowak team and a Rowe & Pitman man, believes that they will. He argues that Rowak's own locally based offices, which have been operating through Rowe & Pitman, in major centres such as New York has solved the "credibility factor."

He reckons that institutions will "more and more want to do one-stop shopping — rather than go to an American or Japanese broker — where they feel that the whole world is being surveyed and get the answers to all their questions."

For the future, Rowak is looking to do around 400 or more trades a day locally in London and a substantial volume of business carried out through the overseas offices. Unlike some of its British competitors developing international dealing subsidiaries, Rowak will be dealing out of its new offices rather than from the Stock Exchange floor.

"If we were involved in a market where there was a tremendous amount of "floor" interest we would pitch our stall where the action is," says Mr Raven. "But screen-based dealing is cost effective."

The main problem for Rowak is keeping its 200 staff together in the new venture. There have been departures — most notably the four-man dealing team which specialises in dealing in Far Eastern securities for Akroyd. They are leaving to join Hoare Govett, which has formed links with Security Pacific, the Californian bank, where they will help operate the international dealing subsidiary. Others are rumoured to be restless.

Appropriately, Rowak's offices overlook a closed courtyard which is dominated by a large modern sculpture of a bucking horse and rider.

U.S. benefits set up Johnson Cleaners for growth next year

BY RAY MAUGHAN

Johnson Group Cleaners is going to make profits of some £6.1m before tax in 1984, against £6.3m in 1983. And as the 39-day deadline for any forecast and property revaluation details in defence of the £44m cash bid from Nottingham Manufacturing expired, the dry cleaning chain said it is looking for "a considerable improvement" in the first half of 1985.

Profits for this period are expected to rise by 27 per cent and, for the 52 weeks ending June 29 1985, the directors are forecasting £7.1m—by some margin a 12 month record.

Profits for the current year have been affected by the cost of servicing an additional £1m of loans, largely associated with U.S. expansion. Much of the forecast improvement stems from America, now starting to break materially into profit to reward a loss-making period of acquisition. The U.S. is expected to cover debt servicing in 1984, to contribute some £300,000 after interest in the first half and about £850,000 for 1985 as a whole.

If Nottingham's 410p per share offer lapses, the Johnson board will pay next April a second interim dividend of not less than 15.42p per share in respect of 1984, which would bring this year's distribution up by over 50 per cent to not less than 18.6p per share.

Johnson also said that its property is valued at either £40.1m or £42m. The first assumes open market value subject to vacant possession or existing sub-leases in the case of non-trading properties.

Nottingham has been sharply aware that Johnson may have attempted to show values on a vacant possession basis, and has been preparing to attack on the obvious assumption that Johnson must continue to trade from its high street estate. But the core of the defence is that a proportion of the portfolio, either occupied or vacant, can be sold each year to provide funds for further U.S. expansion.

So the second value shown of £42m is designed to show the worth of the property which could be realised on a sale and leaseback basis. This makes no provision for any tax on disposals.

Freshbake falls to £509,000

EFFECTS of reorganisation have had a temporary adverse impact on first-half profit from Freshbake Foods Group. And this has been aggravated by having to adopt merger accounting principles in respect of acquisitions as one of them ran at a loss in the pre-acquisition period.

For the six months ended September 30 1984, profit before tax has fallen from the adjusted £959,000 to £509,000. However, the directors are confident of a "satisfactory outcome" to the year ending March 31 1985, with full benefits of the integrated acquisitions reflecting in profits for the following year. They still intend to move from the USM and apply for a full listing as soon as practicable.

The directors say the adverse impact arising from the reorganisation has coincided with higher volume generated from the new listings for the company's products. This, coupled with a continuing upward trend in raw material prices (particularly meat) will have an important bearing on the final outturn.

Including the figures for Baughan's Foods and Muirson Food Brokers International, group turnover for the half year rose from £21.3m to £27.23m but the operating profit therefrom fell from £984,000 to £569,000. Freshbake increased its own volume percentage share of the retail frozen uncooked savoury pastry market significantly in the past four months, largely as a result of additional important listings with multiple retailers.

After tax £193,000 (£219,000) the net profit for the half year came out at £316,000 (£740,000) for earnings of 1.14p (2.67p) per share. The interim dividend is 0.6p net (0.25p).

At Baughan's there was a marked decline in profitability in the pre-acquisition period from April 1 to July 28 1984, and meant a turnround from a profit of £118,000 in 1983 to a loss of £95,000. Mainly as a result of reorganising group production capabilities, however, Baughan's returned to profits in the last two months and made £5,000 (£166,000) for the period. Muirsons has produced "excellent results" since it was acquired and turned in a profit of £136,000 (£77,000).

F. H. Tomkins £3m placing

F. H. Tomkins, distributor of industrial fasteners and motor components, is raising £3m through a placing of 2.45m shares, 8.6 per cent of the expanded equity, at 122½p each. Tomkins shares closed at 139p, up 1p, on Friday.

Proceeds will reduce debt and will finance a £250,000 stock control system and a £300,000 distribution depot.

Tomkins said the placing, arranged by Simon & Coates, "will permit considerable cost savings compared with a rights issue of shares, particularly in terms of underwriting costs, and will benefit Tomkins because of the value at which shares can be issued." It sought shareholder approval at an EGM on December 24.

Tomkins is also expanding through an agreed £4m bid for Hayters, lawn mower manufacturer.

Goodhead splits from parent in £4.5m deal

BY CHARLES BATCHELOR

Goodhead Print Group, the printer of the Mail on Sunday cartoon supplement, has split off from its parent company, Techomes, in a deal worth £4.5m.

This is the first step towards Goodhead, a leading printer of magazines, house journals and free newspapers seeking a quotation on the Unlisted Securities Market, probably next year. Goodhead also announced yesterday record pre-tax profits of £641,000 in the year ended May 31, 1984 on turnover of £19m. A further rise to £800,000-900,000 appears possible for the current year.

Mr Colin Rosser, chairman and chief executive, will retain control of Goodhead with a 54 per cent stake in its equity. A 36 per cent stake has been taken by four institutions and a number of clients of Capel-Cure Myers, the brokers who arranged the deal.

The institutions are Investors in Industry, CIN Industrial Investments, Equity Capital for Industry and Gresham Trust. Mr Malcolm Dunmore, technical director of Goodhead, has a 10 per cent holding.

Goodhead was established in 1972. It employs 450 people mainly in Bicester and Banbury, Oxfordshire and in Bristol. Techomes, a housebuilder, is run by Mr Tony Rosser, elder brother of Colin Rosser. "We decided to demerge because their activities are not in our sphere," said Colin Rosser.

Equitable Life extends unit trust business

The Equitable Life Assurance Society, the oldest mutual life company in the world and the originator of traditional life assurance practice over 200 years ago, today enters fully into the unit trust and unit-linked life sectors.

The company has been a top performer in the with-profit traditional life field for decades. It has also successfully run its Equitable Pelican Unit trust for over 10 years. The general equity trust has also been a top performer over the period.

Its existing unit-linked life contracts have until now been linked to this one fund.

Now the company is launching a much wider range of unit trusts—covering North America, Far East, special situations, high income, gilt and fixed interest and a specialist fund investing in investment trust shares. In addition it is launching three other internal funds—managed, property and money to which life contracts can be linked.

Its existing range of unit-linked contracts has been updated with investors now having a choice of 10 funds.

The change in tax rules over recent years, including the withdrawal of Life Assurance Premium Relief in this year's Budget, has made direct investment in unit trusts a more viable investment for many savers than linked life contracts.

Equitable Life is launching a new regular savings contract with investment direct into units. It has also introduced free unit issues for large investments.

Midsummer will miss forecast

Midsummer Inns, the real ale pub chain acquired in August by [illegible]dam Page and Mr Paul Reece after a boisterous takeover battle, said that it would miss a profit forecast made by the previous board.

The new owners are changing the financial year to end on September 30. Figures will be published next month for the eight months up to that date, and will on a pro rata basis be well below the £110,000 to £150,000 pre-tax profit previously forecast for the year ending January 28 1985.

Midsummer said it was confident that recent steps to reduce overheads and increase margins will show through in results for the current financial year.

The company said it would write off £79,000 after the discovery of a liability in respect of a lease on a pub in Leeds, which has been settled with a £50,000 payment to the freeholder and surrender of the lease with 22 years still to run.

Midsummer has also agreed to buy the Wheatsheaf pub in Woodhouse Eaves, Leicestershire for £150,000 to be satisfied by the issue of 72,860 shares which are being placed at 210p each. Midsummer's shares fell 10p to 215p yesterday.

Highgate & Job

Changes in the EEC regulations affecting the protein division of Highgate & Job Group are reflected in the results for the half year ended June 30 1984, and the loss has increased from £2,000 to £12,000. The oil and chemicals side moved into a profit of £16,000 (loss £1,000) while the protein division incurred a loss of £6,000 (profit £24,000).

The attributable loss was up to £12,000 (£9,000), equal to 1.24p (0.97p) per share.

F.T. Share Information

The following securities have been added to the Share Information Service.

Appledore (A. & P.) Group (Section: Industrials). Emu Hill Gold Mines N.L. (Mines—Australians). Fergabrook Group (Industrials). Iceland Frozen Foods Holdings (Foods, Groceries). T & S Stores (Drapery & Stores). Tyzack (W.) Sons & Turner (Engineering).

FINANCIAL TIMES STOCK INDICES

	Nov. 30	Nov. 29	Nov. 28	Nov. 27	Nov. 26	Nov. 23	1984 High	1984 Low	Since Compilatn High	Since Compilatn Low
Government Secs.	83.00	83.12	82.96	83.00	83.06	82.94	83.77	78.72	127.4	49.18
Fixed Interest	86.11	86.22	86.16	86.05	86.08	86.02	87.48	80.43	150.4	50.53
Industrial Ord	917.3	925.8	929.2	926.3	922.1	910.3	929.2	755.3	929.2	49.4
Gold Mines	554.3	550.5	550.9	559.8	576.8	576.2	711.7	485.7	734.7	43.5
FT Act.All.Share	560.26	563.20	562.61	568.62	554.97	549.62	563.20	464.84	563.20	61.92
FT-SE100	1181.3	1187.9	1187.5	1178.0	1172.3	1158.8	1187.9	986.9	1187.9	986.9

RECENT ISSUES

EQUITIES

Issue price p	Amount paid up	Latest Renunc. date	1984 High	1984 Low	Stock	Closing price p	+or−	Net Div.	Times covered	Gross Yield	P.E. Ratio
‡‡	F.P.	—	110	108	‡‡AberdeenAmPet £1	110	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
*160	F.P.	—	200	164	Access Satellite 5p	198	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
116	F.P.	9/11	178	136	Addison Comms. 5p	178	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
140	F.P.	21/12	165	144	Alida	163	+8	[illegible]	[illegible]	[illegible]	[illegible]
100	F.P.	23/11	110	102	Breakmate 10p	107	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
105	F.P.	7/12	142	115	CVD Inc 50.01	142	+7	[illegible]	[illegible]	[illegible]	[illegible]
115	F.P.	5/12	166	134	Craton Lodge 1p	165	+1	[illegible]	[illegible]	[illegible]	[illegible]
§	F.P.	2/11	120	100	Domin'n Intl. High Inc.	113	−2	[illegible]	[illegible]	[illegible]	[illegible]
§	F.P.	—	23	13	Do. Warrants	22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
78	F.P.	14/12	99	86	Gabicci 5p	99	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
§	F.P.	—	31	24	Health Care S'rvic's	24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
145	F.P.	7/12	190	160	Instem 10p	185	+10	[illegible]	[illegible]	[illegible]	[illegible]
485	F.P.	7/12	118	95	Klark-Teknik 5p	115	−3	[illegible]	[illegible]	[illegible]	[illegible]
117	F.P.	23/11	169	118	Media T'nology 20p	169	+5	[illegible]	[illegible]	[illegible]	[illegible]
§	F.P.	11/1	32	27	Monument Oil 5p	29	+1	[illegible]	[illegible]	[illegible]	[illegible]
140	F.P.	21/12	156	149	P.S.M. Int'l	156	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
140	F.P.	14/12	92	74	Plasmec 10p	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
§	F.P.	16/11	11½	10	Second Market Inv. 5p	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
140	F.P.	10/12	200	184	Share Drug 10p	190	−4	[illegible]	[illegible]	[illegible]	[illegible]
110	F.P.	30/11	138	115	UDO Hldgs. 10p	125	−5	[illegible]	[illegible]	[illegible]	[illegible]
132	F.P.	—	173	156	Wardle Storey 10p	157	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
††	F.P.	—	£38⅛	£36⅛	Wassanen Kon.IDFI.25	£37	−⅛	[illegible]	[illegible]	[illegible]	[illegible]

FIXED INTEREST STOCKS

Issue price £	Amount paid up	Latest Renunc. date	1984 High	1984 Low	Stock	Closing price £	+or−
‡‡	F.P.	—	116	107	Aberfoyle 8% Cnv. Uns. Ln. '95	112	−4
91.574	£30	10/4	33¼	29⅞	African Dev. Bank 11⅛% Ln. 2010	33¼	[illegible]
‡‡	F.P.	—	18p	15p	Automated Sec. 5% Cnv. Cum Red Prf.	17p	[illegible]
‡‡	F.P.	21/12	205p	157p	Elswick-Hopper 6% Cv.Cum. Pf. '92-94	182p	+15
‡‡	F.P.	12/12	110	105	Estate Prop. Inv. 10¾% Cnv. 94 99	108	[illegible]
‡100	£10	24/1	10¼	9¼	Folkestone Water 11½% Red. Deb. 2004	10	[illegible]
‡‡	F.P.	30/11	109	106	Gable Hse. Prop. 10¼% Cnv. Uns. Ln. 95.99	109	[illegible]
199.405	F.P.	—	100¼	100¼	Glasgow Stock'hlds 11½% Deb. 2009	100¼	[illegible]
99.161	£50	17/1	54¼	38¾	Intl. Bk. for Recon. & Dev. 11¼ Ln. 2003	54¼	[illegible]
99.199	£25	15.3	29	24¼	Lon. Shop Prop. 11¾% 1st Mort. Deb. 2015	29	[illegible]
98.102	F.P.	22/11	107	95½	Marley 11¾% Deb. 2009	107	[illegible]
‡‡	F.P.	—	100¾	100½	Nationwide Bldg. Soc. 10½% Bds. 11.11.85	100¼	[illegible]
‡‡	F.P.	—	109	101¾	Normans Grp. 6¼% Cnv. Uns. Ln. 99/2004	109	[illegible]
‡‡	F.P.	—	56	53	Peel 10% Cum. Pref. 50p	55	[illegible]
‡‡	F.P.	12/12	109	100½	Plant & Gen. 9% Cnv. Uns. Ln. 1999	103	[illegible]
‡‡	F.P.	28/1	129	115	Racal Elect 7% Cnv. Uns. Ln. 2008-14	127	[illegible]
100	£10	24/1	10¼	10	Sun'ld & Sth. Shields 11¼% Deb. 2005	10	[illegible]
91.976	£20	27/3	24¼	18½	Sweden 11½ Ln. 2012	24¼	[illegible]

"RIGHTS" OFFERS

Issue price p	Amount paid up	Latest Renunc. date	1984 High	1984 Low	Stock	Closing price p	+or−
5	Nil	—	1pm	½pm	Amalgamated Estates 5p	1pm	[illegible]
50	F.P.	16/1	64	60½	Attwoods	64	[illegible]
38	F.P.	13/11	49	42	Baynes (Charles) 10p	49	[illegible]
100	F.P.	13/12	110	104½	Cambrian & General	106	[illegible]
210	F.P.	—	246	233	Do. Cap 7½p	239	[illegible]
143	Nil	—	22pm	22pm	Equipu	22pm	[illegible]
30	Nil	—	4½pm	3pm	Jacks (Wm)	3½pm	[illegible]
8	Nil	—	12pm	12pm	Lifecare Intl. Units	12pm	[illegible]
205	F.P.	7/12	219	200	Sovereign Oil	200	[illegible]
206	Nil	19/11	127	118	Television Services 50p	125	[illegible]
170	Nil	6/11	112pm	78pm	Tops Ests. 10p	112pm	+2

Renunciation date usually last day for dealing free of stamp duty. b Figures based on prospectus estimates. d Dividend rate paid or payable on part of capital; cover based on dividend on full capital. g Assumed dividend and yield. u Forecast dividend cover based on previous year's earnings. C Canadian. F Dividend and yield based on prospectus or other official estimates for 1985. H Dividend and yield based on prospectus or other official estimates for 1983-84. Q Gross. p Pence unless otherwise indicated. ‡ Issued by tender. || Offered to holders of ordinary shares as a "rights." ** Issued by way of capitalisation. §§ Reintroduced. ¶¶ Issued in connection with reorganisation merger or takeover. ■ Allotment letters or fully-paid. || Introduction. ✱ Unlisted Securities Market. § Placing price. † Figures assumed. †† Official London Listing. ‡‡ Dealt in under Rule 535(3). † Units comprising four ordinary and one new 6¼ per cent Cnv.Red. Prf. 1999.

PENDING DIVIDENDS

Dates when some of the more important company dividend statements may be expected in the next few weeks are given in the following table. The dates shown are those of last year's announcements except where the forthcoming board meetings (indicated thus*) have been officially notified. Dividends to be declared will not necessarily be at the amounts in the column headed "Announcement last year."

	Date	Announcement last year		Date	Announcement last year
*AE	Dec 13	Final 1.4	Intasun	Dec 13	Interim 1.8
*Argyll	Dec 4	Interim 1.75	Johnson Firth Brown	Dec 19	Final nil
Assoc Paper Inds	Dec 13	Final 3.0	Lloyds and Scottish	Dec 21	Final 2.87
*BOC	Dec 6	Final 3.57	London Merchant Securities	Dec 15	Interim 0.6
*Baker Perkins	Dec 10	Interim 2.4	Martin The Newsagents	Dec 12	Final 3.72
*Bass	Dec 6	Final 8.43	McCorquodale	Dec 13	Final 8.25
British Electric Traction	Dec 15	Interim 2.25	*Meyer International	Dec 11	Interim 1.65
British Land	Dec 20	Interim 0.5	*Norcros	Dec 10	Interim 2.3
*Brown (J.)	Dec 5	Interim due	*Northern Foods	Dec 12	Interim due
*Brown (Matthew)	Dec 3	Final 5.82	*Pauls	Dec 6	Interim 2.5
*Capital and Counties	Dec 4	Interim 1.4	Pegler-Hattersley	Dec 7	Interim 5.0
*Charter Cons	Dec 12	Interim 3.75	*Pilkington	Dec 12	Interim 5.0
*Coalite	Dec 5	Interim 1.67	Polly Peck	Dec 12	[illegible]
*Crown House	Dec 10	Final 2.5	*RHM	Dec 4	Final due
Distillers	Dec 15	Interim 4.5	PHP	Dec 5	Final 0.76
English China Clays	Dec 15	Final 5.5	Scottish and Newc Brew	Dec 14	Interim 1.73
*Ferranti	Dec 6	Interim 2.2	Stakis	Dec 19	Final 1.45
GEC	Dec 4	Interim 1.15	*Tate and Lyle	Dec 12	Final due
Grand Metropolitan	Dec 22	Final 5.75	*Trafalgar House	Dec 4	Final 4.5
GUS	Dec 6	Interim 5.5	*Unigate	Dec 13	Interim due
*Greenall Whitley	Dec 10	Final 2.235	Vaux Brews	Dec 6	Final 6.05
*Greycoat City Offices	Dec 13	Interim 0.8	Westland	Dec 6	Final 6.25
*Hall (Matthew)	Dec 4	Interim 1.275	Wests Group	Dec 12	Interim 2.5
*Hambros	Dec 4	Interim 15.25	Whessoe	Dec 19	Final 3.0
*Hanson Trust	Dec 6	Final 3.0	*Wolverhampton and Dudley Brws	Dec 11	Final 4.55
Haslemere Estates	Dec 15	Interim 2.08			
*IC Gas	Dec 11	Interim 4.0			
*Initial	Dec 14	Interim 4.25			

* Board meeting intimated. † Rights issue since made. ‡ Tax free. § Scrip issue since made. ¶ Forecast.

COMPANY NEWS IN BRIEF

We have been asked to point out that Candover Investments' move to go public will be this month and will be effected by a placing of around 25 per cent of the equity.

* * *

Aggressive marketing and a new store in Dublin helped push turnover at C.P.L. Holdings up from £42.1m to £43m for the half year to September 30 1984. At the pre-tax level, however, profits slipped from £1.15m (£970,000) to £1.03m (£869,000).

An interim payment of 5p holds the total at 6p—the directors point out that although this is not covered by earnings of 5.4p (6.3p) per share, they have taken into account positive cash flow and current borrowings.

The company, which makes concrete products and rooftiles, is a subsidiary of Morley (Overseas).

* * *

Arthur Henriques, ladies' clothing manufacturer, suffered a pre-tax loss of £17,000 for the half year to June 29 1984 as against a £71,000 profit last time. Turnover was little changed at £2.33m, compared with £2.27m. There is no interim dividend (0.5p). Last year's final was also omitted.

Since May a major reorganisation has been set in-hand, the major part of which will have been carried out in the second half. Associated costs and expenses will reflect adversely on the final results. But the directors are confident that positive results will start to come through next year.

The directors are keen to expand the company and a number of acquisition opportunities are under consideration.

Loss per 10p share was 0.42p (0.83p earnings).

* * *

Despite sustained efforts to improve efficiency at Castings, continuing cost increases have had their effect on profit margins, the directors report. From a turnover £905,000 higher at £4.62m in the half year ended September 30 1984 the profit before tax was up by £52,000 to £419,000.

The company continues to be busy with the foundries all working full-time, and the directors are expecting results for the year 1984-85 to be satisfactory.

The current interim dividend is being raised from 0.75p to 1p net and this is intended to reduce the disparity and should not be taken as indicating a similar rise in the final — 2.5p last time. After tax £188,000 (£183,000) the half year's net profit was £231,000 (£184,000) for earnings of 3.41p (2.71p) per share.

* * *

Profits of Mountview Estates, property dealing and investment concern, are expected to be comparable with 1983/84's £4.29m pre-tax. The interim dividend is the same at 1p net per 5p share.

BOARD MEETINGS

The following companies have notified dates of board meetings to the Stock Exchange. Such meetings are usually held for the purposes of considering dividends. Official indications are not available as to whether the dividends are interims or finals and the subdivisions shown below are based mainly on last year's timetable.

TODAY

Interims: Bremner, Brownlee, Buffelsfontein Gold Mining, Dominion International, FKI Electricals, Formdesign, Kleen-E-Ze, Leigh Interests, Lynton, PWS International, Southwest Resources, Vinten.

Finals: Matthew Brown, Cardiff Property, Dundee and London Investment Trust, Grootvlei Proprietary Mines, Marievale Consolidated Mines, St Helena Gold Mines, Stilfontein Gold Mining, Trans-Natal Coal Corporation, West Rand Consolidated Mines.

FUTURE DATES

Interims—

Gibbs Mew ... Dec 6

Hellenic and General Trust ... Dec 6

Finals—

LPA Industries ... Dec 10

Tate and Lyle ... Dec 12

Whessoe ... Dec 17

NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES

Closing prices, November 30

12 Month High	12 Month Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
23½	13¼	AAR	.48	2.5	17	254	19¼	19	19⅛	−⅛
30½	9⅛	AGS			8	149	10⅞	10¼	10⅝	+⅛
17⅞	13⅛	AMF	.50	3.3	83	458	15	14⅝	15	+¼
41⅞	24¼	AMR			5	1663	33	32¼	32½	−¼
20⅜	18¼	AMR	pf2.18	11.		16	19⅝	19⅜	19⅝	+¼
41½	27½	AMR	pf2.13	6.3		46	33⅞	33¼	33½	−⅛
25¼	22⅞	ANR	pf2.67	12.		1	23	23	23	
23	19	ANR	pf2.12	11.		5	19¼	19¼	19¼	−¼
15¼	8⅞	APL			3	13	10⅞	10¼	10⅜	
71¼	40¼	ARA	2.10	3.0	14	1809	71¼	71	71	
60¼	44¼	ASA	3a	5.4		333	56½	55	55¼	−⅞
30¼	18½	AVX	.32	1.8	11	202	18⅜	18	18	−⅜
46¾	30¾	AbtLab	1.20	2.9	13	1178	41½	41⅛	41¼	
23¼	16½	AccoWd	s.44	2.1	18	35	21⅜	21¼	21⅜	−⅛
27¼	12½	AcmeC	.40	2.8		78	14¼	13¾	14¼	+¼
12⅛	8⅞	AcmeE	.32b	3.5	13	27	9¼	9⅛	9⅛	−⅛
18¾	15	AdaEx	2.11e	13.		120	16⅜	16	16⅛	
18⅞	11⅞	AdmMl	.32	2.2	7	29	14⅞	14¼	14¼	−¼
22	12⅝	AdvSys	.811	6.8	11	383	12¼	d11⅞	11⅞	−⅝
41⅛	25⅛	AMD			12	2348	28¼	27⅛	27⅝	
14½	7⅞	Advest	.12	1.9		138	7½	d6¼	6¼	−1¼
16¼	8¼	Aerflex			10	58	11¼	10⅞	11¼	−⅜
38	27¼	AetnLf	2.64	7.8	29	1035	35⅛	34⅞	34⅞	
58¼	52⅝	AetL	pf5.78e	10.		20	56	56	56	+¼
34½	15¼	Ahmns	1.20	4.8	11	78	25	24½	25	+½
5½	2⅞	Aileen				45	3⅛	3⅛	3⅛	
48⅛	38½	AirPrd	1.20	2.7	10	624	45	44⅞	45	+⅛
30¼	13	AirbFrt	.60	3.1	11	40	19⅝	19⅛	19⅝	+½
4⅛	1⅞	AlaMoa	3e	75.		491	4⅛	3⅞	4	−⅛
31	28¼	AlaP	pfA3.92	13.		5	30½	30⅛	30½	+⅛
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

12 Month High	12 Month Low	Stock
29½	18⅛	BethSt
59⅞	40⅝	BethSt
29¼	19¼	BethSt
34	19½	Beverly
24⅞	18	BigThr
28⅛	17¼	BlackD
26	20	BlckHP
40	14⅞	BlairJn
50	37	BlckHR
59½	35⅞	Boeing
45	32½	BoiseC
57⅞	46	BoiseC
27⅞	15¼	BoltBer
63½	49⅞	Borden
25⅞	16⅞	BorgWa
8⅝	4¼	Bormns
34⅞	24⅞	BosEd
10¼	8	BosE
12¼	10½	BosE
25⅞	14⅞	Bowtr
32⅞	25½	BrigSt
50⅞	40¼	BrisM
6	3¼	BritLnd
30	21¼	BritPt
7⅞	3½	Brock
18⅛	14⅝	Brckwy
35½	28	BkyUG
22⅞	19⅛	BkUG
33½	29	BkUG
20⅞	13	BwnSh
[illegible]	[illegible]	[illegible]

B-B-B

C-C-C

D-D-D

E-E-E

F-F-F

G-G-G

H-H-H

I-I-I

J-J-J

K-K-K

L-L-L

M-M-M

N-N-N

O-O-O

P-Q

Continued on Page 22

Closing prices, November 30

AMERICAN STOCK EXCHANGE COMPOSITE CLOSING PRICES

12 Month High	Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
7⅞	3⅝	ADI	n		20	84	5½	5¼	5½	+⅛
3⅝	1⅛	AICPh				109	1	d1	1	−⅛
15¼	8¼	ALLab	n .20	2.1	9	37	9⅝	9⅝	9⅝	
13⅞	12	AMC	n .12	.9	10	2	12⅝	12⅝	12⅝	
3¼	2⅞	AM	Intl			560	2⅞	2⅞	2⅞	
2⅝	⅛	ATI				11	13-16	13-16	13-16	
71¼	58	ATTFd	n5.52e	7.9		122	70⅝	70¼	70¼	−¼
7⅞	2¼	AcmePr				13	3⅛	3⅛	3⅛	
16⅞	8½	AcmeU	.32	3.2	11	11	10	9⅝	10	+⅛
16⅞	9⅝	Action			34	30	13¾	13⅝	13⅝	−⅛
9¼	4⅞	Acton				105	4⅝	4½	4⅝	−⅛
25½	15⅞	AdRusl	s.14	.6	19	44	24½	24½	24½	
24¼	15	Adobe	.24	1.5	11	11	16⅝	16⅛	16⅝	
8⅞	4½	Aeronc			8	224	7	6½	7	+⅛
25¼	16⅞	AfilHsp	.44	2.7	7	48	16⅞	d16½	16½	−⅛
60⅞	38⅝	AffPub	.80	1.8	14	10	45⅝	45⅛	45⅛	
8⅝	6	AirExp			9	34	7½	7⅜	7½	−⅛
5¼	2¼	Alamco			6	338	2⅞	d2⅞	2⅞	
14	6⅞	AlbaW	15j		7	23	6⅞	6½	6⅞	+½
9¼	6½	Aloha	.48r	6.7	2	1	7⅛	7⅛	7⅛	
22¼	9⅝	Alphaln	.05	.5	13	203	10	d9½	10	+⅛
1⅜	½	Allen				66	13-16	¾	13-16	+1-16
½	⅛	Alter	wt			10	⅛	⅛	⅛	
22	11	AlzaCp			47	163	18⅛	18	18	−⅛
20¼	8½	Amdahl	.20	1.9	14	1192	11⅞	11¼	11⅜	−⅛
17	6½	Amedco	.08	1.1		46	7½	7¼	7½	+⅛
7¼	4⅛	AmBilt	.15	2.1	5	40	7⅛	6⅞	7	+⅛
9⅝	3	AmCap				67	4⅞	4⅛	4⅝	−½
37½	30	AContrl	.92a	2.5	11	2	37⅛	37⅛	37⅛	
27	12¼	AExp	wt			27	22⅝	22	22¼	−⅛
7⅞	5⅝	AFruc	A			z500	7⅛	7⅛	7⅛	
7½	5⅝	AFruc	B			z600	7⅛	7⅛	[illegible]	

Continued on Page 23

NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES

Continued from Page 21

X–Y–Z

12 Month High	Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
52¼	33¼	Xerox	3	8.1	11	7430	37⅛	36¼	37⅛	−⅛
50½	45¼	Xerox	pf5.45	11.		22	50½	50½	50½	
38¼	19	XTRA		2.9	8	357	22⅞	22¼	22¼	
33⅞	24	ZaleCp	1.32	4.7	9	12	28⅝	28¼	28⅝	
24⅞	15¼	Zapata	.84	5.0	13	585	16⅞	16½	16⅞	+⅛
49	28¾	Zayre	.40b	.9	12	857	45	44⅝	44⅞	+⅛
38⅝	20	ZenithE			7	1485	22¼	21¾	22	−⅛
27⅝	18	Zero	.40	1.9	16	72	21⅝	21	21	−⅛
34	21⅞	Zurnin	1.32	5.0	11	154	26⅞	26	26⅝	+⅛

Sales figures are unofficial. Yearly highs and lows reflect the previous 52 weeks plus the current week, but not the latest trading day. Where a split or stock dividend amounting to 25 per cent or more has been paid, the year's high-low range and dividend are shown for the new stock only. Unless otherwise noted, rates of dividends are annual disbursements based on the latest declaration.

a–dividend also extra(s). b–annual rate of dividend plus stock dividend. c–liquidating dividend. cld–called. d–new yearly low. e–dividend declared or paid in preceding 12 months. g–dividend in Canadian funds, subject to 15% non-residence tax. i–dividend declared after split-up or stock dividend. j–dividend paid this year, omitted, deferred, or no action taken at latest dividend meeting. k–dividend declared or paid this year, an accumulative issue with dividends in arrears. n–new issue in the past 52 weeks. The high-low range begins with the start of trading. nd–next day delivery. P/E–price-earnings ratio. r–dividend declared or paid in preceding 12 months, plus stock dividend. s–stock split. Dividends begins with date of split. sls–sales. t–dividend paid in stock in preceding 12 months, estimated cash value on ex-dividend or ex-distribution date. u–new yearly high. v–trading halted. vi–in bankruptcy or receivership or being reorganised under the Bankruptcy Act, or securities assumed by such companies. wd–when distributed. wi–when issued. ww–with warrants. x–ex-dividend or ex-rights. xdis–ex-distribution. xw–without warrants. y–ex-dividend and sales in full. yld–yield. z–sales in full.

هكذا عن الأصل

WORLD STOCK MARKETS

OVER-THE-COUNTER *Nasdaq national market, closing prices, November 30*

[illegible]

AMERICAN STOCK EXCHANGE CLOSING PRICES

Continued from Page 22

[illegible]

CANADA

TORONTO
Closing prices November 30

[illegible]

Continued on Page 24

MONTREAL
Closing prices November 30

[illegible]

AUSTRIA

1984 High	Low	Nov. 30	Price %
227	202	Credit'stalt Pfd..	227
342	316	Goesser	329
410	381	Interunfall	394
237	203	Laenderbank	227
369	300	Perlmooser	363
162	139	Steyer—Daimler.	157
852	206	Veitscher Mag	242

BELGIUM/LUXEMBOURG

1984 High	Low	Nov. 30	Price Frs.
2,085	1,740	B.B.L.	1,850
5,600	4,865	Banq. Int. A. Lux	5,500
5,000	3,105	Bekaert B.	4,380
2,800	2,010	Ciment CBR	2,505
328	175	Cockerill	276
6,050	4,750	Delhaize	5,750
2,920	2,290	EBES	2,860
8,800	5,850	Electrobel	8,600
2,425	1,800	Fabrique Nat	2,100
3,595	3,060	GB Inno BM	3,070
2,800	2,065	GBL (Brux)	2,090
3,935	2,970	Gevaert	3,600
6,480	4,860	Hoboken	6,030
3,000	1,805	Intercom	2,200
7,610	6,280	Kredietbank	7,450
10,350	8,850	Pan Hldgs	9,900
8,210	6,010	Petrofina	7,050
10,100	7,320	Royale Belge	10,100
3,600	2,885	Soc. Gen. Banq	3,285
1,940	1,600	Soc Gen. Belge	1,780
8,340	5,190	Sofina	7,700
4,500	3,430	Solvay	4,100
1,520	1,050	Stanwick Intl.	1,430
4,300	3,125	Tractionel	3,875
5,490	3,975	UCB	4,880
2,670	1,865	Wagon Lits	2,385

DENMARK

[illegible]

FRANCE

1984 High	Low	Nov. 30	Price Frs.
1,999	1,670	Emprunt 4½% 1973	1,670
10,020	8,890	Emprunt 7% 1973	8,975
244	202	Accor	244
578	497	Air Liquide	562
519	375	BIC	497
1,995	1,415	Bongrain	1,740
836	560	Bouygues	684
2,885	2,400	BSN Gervais	2,452
1,558	1,012	CIT Alcatel	1,358
1,915	1,005	Carrefour	1,810
1,145	774	Club Mediter	1,055
600	427	Cie Bancaire	579
262	207	Cofimeg	238.9
2,430	2,241	Damart	2,290
1,197	780	Darty	1,169
941	593	Dumez S.A	640
598	488	Eaux (Cie Gen.)	535
278	179	Elf-Aquitaine	227
3,020	2,195	Essilor	2,835
705	537	Gen.Occidentale.	668
97.4	63.9	Imetal	76.5
393.5	300	Lafarge-Coppee	379
2,600	2,101	L'Oreal	2,360
2,340	1,778	Legrand	1,979
357	140	Maisons Phenix	186.5
2,050	1,300	Matra S.A.	1,639
1,084	740	Michelin B.	788
2,005	1,372	Midi (Cie)	2,000
1,871	1,313	Moet-Hennessy	1,813
140.5	90	Moulinex	93.8
71.8	43.7	Nord Est	71.5
845	662	Pernod Ricard	733
574	452	Perrier	503
313	184.5	Petroles Fra.	244.8
257.5	179.5	Peugeot S.A.	232.2
199.9	150.2	Printemps (Au.)	189
410	207	Radiotech	239
1,340	1,000	Redoute	1,210
1,710	726	Roussel-Uclaf	1,600
285	235	Sefimeg	275
1,735	1,180	Skis Rossignol	1,730
2,148	1,470	Telemech Elect.	2,148
394.8	239	Thomson (CSF)	387
358	205	Valeo	257

GERMANY

1984 High	Low	Nov. 30	Price Dm
115.7	80	AEG-Telef.	104.9
1,147	725	Allianz Vers	1,032
179.2	146.6	BASF	173.9
186.5	152.2	Bayer	184.8
323.5	247	Bayern-Hypo	325.5
358	287	Bayern-Verein	333
316	219	BHF-Bank	278.5
453	290.5	BMW	371
247.5	192.8	Brown Boveri	204.8
190	136.5	Commerzbank	174.3
141.8	107.4	Conti Gummi	116.7
638	515	Daimler-Benz	575
412	338	Degussa	358.5
192.5	136.5	D'sche Babcock.	150
383	302.1	Deutsche Bank	383.5
189.4	138.5	Dresdner Bank	189.5
166.7	126.5	GHH	153
623	450	Hochtief	469
195.5	155.5	Hoechst	183
132.5	87.5	Hoesch Werke	99.7
466	349	Holzmann (P)	364
203	161	Horten	165.5
297	210	Hussel	287
283	219.8	Karstadt	252.5
269.8	188	Kaufhof	235.5
284.5	218	KHD	252
78.5	47.9	Kloeckner	69.3
418	336	Linde	383.8
181.5	133	Lufthansa	174.5
161	125	MAN	147
158	131.8	Mannesmann	146
561	449	Mercedes Hld.	502
249	200	Metallgesell.	215
1,370	910	Muench Rueck	1,170
548	458	Nixdorf	523
1,115	918	Porsche	1014
288	216.5	Preussag	253
188.8	125.5	Rhein West Elect	186
291	245	Rosenthal	247
418.5	317	Schering	416.5
459.7	353.5	Siemens	454.4
94.5	69.3	Thyssen	79.8
198	160	Varta	176
186	159.5	Veba	171.6
127.9	108.5	V.E.W	123
335	285	Verein-West	295
231.8	163	Volkswagen	198.1

SWEDEN

1984 High	Low	Nov. 30	Price Kronor
400	330	AGA	335
302	170	Alfa-Laval	189
480	280	ASEA (Free)	356
540	300	Astra (Free)	326
141	96	Atlas Copco	99.5
531	205	Cardo (Free)	225
198	114	Cellulosa	117
288	218	Electrolux B	228
390	260	Ericsson	267
370	280	Esselte	288
375	218	Mo Och Domsjo.	258
247	153	Pharmacia	193
609	310	Saab Scania Free	450
425	310	Sandvik	345
445	278	Skandia	320
75	52	Skan Enskilda	55.5
222	154	SKF	165
197.5	145	St. Kopparbergs	151
237	169	Sven Handelsbn.	188
302	215	Swedish Match	248
258	189	Volvo B (Free)	217

SPAIN

[illegible]

NORWAY

1984 High	Low	Nov. 30	Price Kroner
190	140	Bergens Bank	156
340	215	Borregaard	295
190	139	Cristiania Bk	155
188.5	142	Den Norsk Credit	157
187.5	108	Elkem	114
178.8	132.5	Kvaerner	169
385	252	Norsk Data	365
137.5	102.5	Norsk Hydro	105.5xa
272.5	172	Storebrand	197.7

AUSTRALIA

1984 High	Low	Nov. 30	Price Aust. $
5.93	4.27	ANZ Group	5.32
1.05	0.50	Alliance Oil Dev.	0.9
2.11	1.40	Ampol Pet.	1.82
1.05	0.80	Ashton	0.85
1.97	1.65	Aust. Cons. Ind.	1.8
3.4	2.35	Aust Guarantee	3.25
2.75	1.90	Aust. Nat. Inds.	2.68
2.46	1.80	Aust. Paper	2.9
6.40	3.90	Bell Group	5.5
8.90	3.50	Bell Res.	4.75
1.72	1.20	Bond Corp Hldgs	1.86
4.00	3.02	Boral	3.32
2.72	1.42	Bougainville	1.92
3.62	2.50	Brambles Ind.	3.62
3.62	2.1	Bridge Oil	2.58
12.16	9.24	B.H. Prop.	10.45
6.20	4.46	CRA	5.44
4.28	2.89	CSR	3.07
4.56	3.82	Carlton & Utd	4.30
5.56	4.08	Castlemaine Tys	5.12
4.24	3.30	Coles (G.J.)	4.14
3.22	2.05	Comalco "A"	2.25
1.30	0.37	Consolidated Pet	0.53
1.6	1.10	Costain Aust.	1.35
2.00	1.45	Dunlop Aust.	1.87
3.55	2.33	Elders IXL	3.28xc
1.80	1.30	Energy Res	1.46
2.40	1.85	Gen. Prop. Trust	2.29
3.95	2.88	Hardie (James)	3.42
3.3	1.90	Hartogen Energy	2.2
[illegible]			
4.40	3.80	Smith (Howard)	3.4
2.48	1.53	Thos. Natwide	1.77
5.9	4.98	Tooth	5.9
4.05	2.55	Vamgas	3.5
4.45	2.85	Western Mining	3.28
4.08	3.38	Westpac Bank	4.08
1.35	0.93	Woodside Petrol.	1.2
2.80	2.2	Woolworths	2.75
3.82	2.50	Wormald Intl.	3.09

ITALY

1984 High	Low	Nov. 30	Price Lire
19,750	14,995	Banca Com'le	15,550
183	89	Bastogi IRBS	120
2,500	1,418	Centrale	2,156
5,655	3,540	Credito Varesino	3,815
4,625	1,675	Fiat	1,905
59	27	Finsider	46.25
39,300	29,070	Generali (Assc.)	31,400
3,485	2,621	Invest	2,921
64,950	40,500	Italcementi	64,200
503	345	La Rinascenti	497
1,284	1,112	Montedison	1,236
6,080	3,865	Olivetti	5,929
3,362	2,464	Pirelli Co.	3,362
1,974	1,419	Pirelli Spa	1,786
2,018	1,336	Snia BPD	2,000
14,600	10,750	Toro Assic	11,875
11,310	8,060	do. Pref	8,750

NETHERLANDS

1984 High	Low	Nov. 30	Price Fls
215	153	ACF Holding.	183
146	107	AEGON	137
236	168.5	Alhold	182.7
123.2	77	AKZO	95
445	203	ABN	344
200.5	141.9	AMEV	199
82	51.6	AMRO	63.7
222	151	Bredero Cert	158.5
52	8.8	Bos Kalis Westm	15
75	61	Buehrmann-Tet.	68.1
41.5	30.1	Calland Hldgs	31.4
161.8	124	Dordtsche Pet'm	151.7
117	73	Elsevier-NDU nv.	113.5
76	41	Fokker	76
173.5	130.7	Gist-Brocades.	162.7
157	116	Heineken	142.8
66.4	41.6	Hoogovens	62.2
44.8	32.6	Int-Mueller	35.7
46.5	30.0	KLM	42.3xc
49.0	34.1	Naarden.	45.5
244	196	Nat Ned Cert	242.5
198	123	Ned Mid Bank.	143
162	99.7	Nedlloyd	160
277	212	Oce Grinten.	277
34.5	24.4	Ommeran (Van)	27.6
77	53	Pakhoed	66.5
57.3	41.7	Phillips	54.3
70	58.3	Robeco	66.5
139	130.1	Rodamco	135.7
67.4	55.3	Rolinco	61.8
43.6	39.6	Rorento	43
180.3	136.2	Royal Dutch	168.8
313.2	232.5	Unilever	301.8
140	90	VMF Stork	131.5
199.8	137	VNU	197
145.5	72.6	West Utr Bank	124

SWITZERLAND

1984 High	Low	Nov. 30	price Frs.
928	660	Alusuisse	750
4,590	3,360	Bank Leu	3,750
1,580	1,240	Brown Boveri	1,315
2,560	2,085	Ciba Geigy	2,455
2,190	1,655	do. (Part Certs)	1,960
2,385	2,040	Credit Suisse	2,295
2,820	2,290	Elektrowatt	2,490
748	590	Fischer (Geo)	600
112 250	86,125	Hoff-Roche PtCts	87,250
10,900	8,650	Hoff-Roche 1/10	8,750
6,825	5,725	Jacobs Suchard	6,125
1,925	1,700	Jelmoli	1,890
1,600	1,290	Landis & Gyr	1,500
5,600	4,665	Nestle	5,330
1,545	1,030	Oer-Buehrle	1,300
280	243	Pirelli	247
7,600	6,450	Sandoz (Br)	7,250
1,225	940	Sandoz (Pt Cts)	1,135
645	460	Schindler (Pt Cts)	640
4,010	810	Sika	1,040
4,175	3,410	Surveillance	3,685
1,027	900	Swissair	1,018
365	309	Swiss Bank	356
8,350	7,050	Swiss Reinsce	7,700
1,590	1,320	Swiss Volksbk	1,465
3,660	3,150	Union Bank	3,610
3,295	2,770	Winterthur	3,250
18,900	16,550	Zurich Ins	17,900

SINGAPORE

1984 High	Low	Nov. 30	price $
3.14	1.66	Boustead Hldgs.	1.9
5.20	2.59	Cold Storage	2.83
10.70	5.35	DBS	5.85xa
6.00	4.62	Genting	4.9
2.91	1.90	Haw Par. Bros	2.02
4.74	2.88	Hong Leong Fin.	3.0
3.65	2.31	Inchcape Bhd.	2.4
3.65	1.58	Keppel Shipyard	1.68
10.40	5.40	Malay Banking	5.7
3.32	2.2	Malay Utd. Int.	2.29
2.27	0.8	Multi Purpose	0.93
11.80	8.75	OCBC	8.95
5.05	3.04	OUB	4.12
2.53	1.62	Public Bank	1.69
2.87	1.83	Sime Darby	1.85
6.95	4.42	Straits Trdg	4.92
3.99	2.91	Tate Lee Bk.	2.92
5.90	4.14	UOB	4.3

HONG KONG

1984 High	Low	Nov. 30	Price H.K.$
29.7	17.8	Bank East Asia	22.9
10.6	6.15	Cheung kong	9.1
12.5	7.5	China Light	12xa
4.35	1.14	Evergo	1.48
47.0	25.9	Hang Seng Bank	41
7.4	5.05	HK Electric	6.45
4.7	2.75	HK Kowloon Wh.	4.7
4.8	2.02	HK Land.	3.72
7.76	5.2	HK Shanghai Bk.	7.4
49	35.5	HK Telephone	48.25
15.9	8.4	Hutchison Wpa	16.8
14.3	5.5	Jardine Math	8.6
4.22	2.25	New World Dev.	4.22
2.87	1.95	Orient O'seas	2.8
4.0	2.02	O'seas Trust Bnk	2.57
8.3	4.12	SHK Props	7.5
2.60	1.44	Shell Elect.	1.68
21.0	12.9	Swire Pac A.	20.2
4.95	2.65	TV-B	4.95
4.2	2.85	Wheel'k Mard A.	3.75
2.3	1.46	Wheel'k Maritme.	1.46
2.6	1.37	World Int. H'ldgs	1.51

JAPAN

1984 High	Low	Dec. 1	Price Yen
1,270	980	Ajinomoto	1,120
2,860	1,830	Alps Electric	1,960
1,410	985	Amada	1,080
642	405	Asahi Chem.	620
870	665	Asahi Glass	862
653	526	Bridgestone	543
1,670	1,070	Canon	1,520
1,790	1,080	Casio Comp.	1,560
1,170	940	Chugai Pharm.	1,080
709	446	Citizen	585
737	620	Daiel	630
1,180	875	Dai Nippon Ptg.	1,000
600	435	Daiwa House	593
390	307	Ebara	345
[illegible]			
330	266	Kajima	270
845	660	Kao Soap	777
761	580	Kashiyama	623
625	510	Kirin	512
1,150	890	Kokuyo	920
545	408	Komatsu	422
765	532	Konishiroku	565
343	295	Kubota	320
503	416	Kumagai	445
8,440	5,250	Kyoto Ceramic	7,150
635	380	Maeda Const	468
1,650	1,080	Makino Milling	1,250
1,320	887	Makita	1,010
415	265	Marubeni	302
700	535	Marudai	535
1,450	1,000	Marui	1,070
2,010	1,400	MEI	1,390
791	602	M'ta Elec. Works	623
1,230	500	M'bishi Bank	1,170
589	501	M'bishi Corp	517
449	361	M'bishi Elect	405
560	438	M'bishi Estate	523
273	216	MHI	241
390	321	Mitsui Co.	348
778	606	Mitsui Estate	696
406	334	Mitsukoshi	347
970	620	NGK Insulators	965
232	191	Nihon Cement.	206
1,630	1,300	Nippon Denso.	1,390
1,540	1,050	Nippon Elect	1,240
356	280	Nippon Express	356
1,590	600	Nippon Gakki	1,490
162	133	Nippon Kokan.	138
1,220	835	Nippon Oil.	883
740	490	Nippon Seiko	700
704	500	Nippon Shimpan	550
185	143	Nippon Steel	148
365	304	Nippon Suisan.	333
16,500	6,990	NTV	13,010
262	213	Nippon Yusen	239
765	500	Nissan Motor	608
631	410	Nisshin Flour	520
232	156	Nisshin Steel	163
950	614	Nomura	796
1,210	830	Olympus.	1,110
4,180	2,400	Orient Leasing	3,350
3,850	2,240	Pioneer	2,490
760	614	Renown	646
1,190	809	Ricoh	955
1,020	655	Sankyo	884
586	456	Sanyo Elect.	459
529	358	Sapporo	395
626	540	Sekisui Prefab	590
9,300	7,270	Seven Eleven	9,140
1,410	991	Sharp	1,020
860	486	Shimadzu	855
770	590	Shionogi	681
1,230	945	Shiseido	1,140
4,170	3,200	Sony	3,580
1,160	570	Stanley	930
1,570	600	Sumitomo Bank.	1,570
1,000	745	S'tomo Elect	965
640	255	S'tomo Marine	640
196	147	S'tomo Metal	148
566	438	Taihei Dengyo	486
238	185	Taisei Corp	201
1,070	871	Taisho Pharm.	936
850	665	Takeda	760
7,080	4,500	TDK	4,870
456	336	Teijin	428
725	650	Teikoku Oil	660
708	513	Tokyo Marine	708
915	695	TBS	800
1,400	1,040	Tokyo Elect.Pwr.	1,330
188	137	Tokyo Gas	162
864	600	Toyko Sanyo	689
990	691	Tokyo Style	705
368	254	Tokyu Corp	303
915	654	Toppan Print	900
500	382	Toray	413
[illegible]			

SOUTH AFRICA

[illegible]

NOTES:—Prices on this page are as quoted on the individual exchanges and are last traded prices. § Dealings suspended. xd Ex dividend. xc Ex scrip issue. xr Ex rights. xa Ex all.

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OVER-THE-COUNTER

Continued from Page 23

Stock	Sales (Hnds)	High	Low	Last	Chng

Company Notices

NEGIT S.A.
10A BOULEVARD ROYAL, LUXEMBOURG
NOTICE TO SHAREHOLDERS
NOTICE OF MEETING

NOTICE IS HEREBY GIVEN that an Extraordinary General Meeting of Negit S.A. will be held at the registered office of the company in Luxembourg, 10a, Boulevard Royal on Tuesday, 11th December, 1984 at 11 a.m. for the purpose of considering the following agrenda:

1. To appoint two new directors — Mr Olivier D'Auriol — Mr Burton Weiss
2. To indicate in the Articles of Incorporation the application of the law of 25th August, 1983 as it applies to mutual investment funds.
3. To approve the change of name. New name proposed: Parinter Bond Fund S.A.
4. To include in the Articles the capital authorised by the Extraordinary General Meeting of 1st December, 1983 and the means eventually of increasing the capital.
5. To authorise the payment of dividends on new shares and the reduction to 5 years of the period between declaration and claiming of dividends.
6. To cancel all preferential rights of subscription.
7. To cancel the Articles relating to the possession of shares by American residents.
8. To decide to proceed with the liquidation of the repurchase company, Negit Repurchase Company S.A., and description of the means of repurchase by the company itself.
9. To approve the amended version of the articles.

The general meeting shall be regularly constituted and shall validly deliberate on the resolutions 2 to 9 if a quorum of shareholders representing one half of the share capital is present or represented. The resolution 2 will be carried by a majority of 1/3 of votes of those present or represented. The resolutions 3 to 9 will be carried by a majority of 3/4 of votes of those present or represented.

The first resolution will be carried by a majority of those present and voting either in person or by proxy.

The shareholders on record at the date of the meeting are entitled to vote or give proxies. Proxies should arrive at the registered office of the company not later than twenty-four hours before the meeting.

The present notice and a form of proxy has been sent to all registered shareholders on record at 19th November 1984.

Forms of proxy are available on request at the registered office of the company.

By Order of the Board of Directors
J. PIERSON, Director

ITO-YOKADO CO., LTD.
(CDRs)

The undersigned announces that as from 6th December 1984 at Kas-Associatie N.V., Spuistraat 172, Amsterdam and at Banque Générale du Luxembourg S.A. in Luxembourg div. cp. no. 26 (accompanied by an "Affidavit") of the CDRs Ito-Yokado Co., Ltd. will be payable with US$1.66 per CDR, repr. 5 Dep. Shs. of 10 shs. each, US$16.60 per CDR, repr. 50 Dep. Shs. of 10 shs. each, US$33.20 per CDR, repr. 100 Dep. Shs. of 10 shs. each (div. per record date 31.08.1984: gross Yen 9.5 p. sh.) after deduction of 15% Japanese tax = Yen 71.25 = $0.29 per CDR repr. 5 Dep. Shs. of 10 shs. each, Yen 712.50 = $2.90 per CDR, repr. 50 Dep. Shs. of 10 shs. each, Yen 1,425 = $5.80 per CDR, repr. 100 Dep. Shs. of 10 shs. each. Without an Affidavit 20% Japanese tax = Yen 95 = $0.38 per CDR, repr. 5 Dep. Shs. of 10 shs. each, Yen 950 = $3.80 per CDR, repr. 50 Dep. Shs. of 10 shs. each, Yen 1,900 = $7.60 per CDR, repr. 100 Dep. Shs. of 10 shs. each will be deducted.

After 31.03.1985 the dividend will only be paid under deduction of 20% Jap. tax with resp. $1.57, $15.70 and $31.40 net per CDR, repr. 5, 50,100 Dep. Shs. of 10 Shs. each. In accordance with the Japanese tax regulations.

AMSTERDAM DEPOSITARY COMPANY N.V.
Amsterdam.
22nd November 1984.

C. ITOH & CO. LIMITED

ANNOUNCE THE FOLLOWING:—
It has been determined at a board meeting held on 16th November 1984, that the interim dividend for the year ending 31st March 1985 shall be paid to shareholders on record as at 30th September 1984, at the rate of 1.5 Yen per share on and after 19th December 1984.

The semi-annual report for the six months ended 30th September 1984 will be available at Hambros Bank Limited and Banque Internationale a Luxembourg by the end of December 1984.

HAMBROS BANK LIMITED
3rd December 1984.

MAKITA ELECTRIC WORKS, LTD.
(CDRs)

The undersinged announces that as from 6th December 1984 at Kas-Associatie N.V., Spuistraat 172, Amsterdam, div. cp. no. 33 (accompanied by an "Affidavit") of the CDRs Makita Electric Works, Ltd. will be payable with Dfls. 5.14 net per CDR, repr. 50 shs. and with Dfls. 102.80 net per CDR, repr. 1,000 shs. (div. per record date 20.11.1984: gross Yen 9 p. sh.) after deduction of 15% Japanese tax = Yen 67.50 = Dfls. 0.93 per CDR repr. 50 shs., Yen 1,350 = Dfls. 18.60 per CDR, repr. 1,000 shs., without an Affidavit 20% Jap. tax = Yen 90 = Dfls. 1.24 per CDR, repr. 50 shs., Yen 1,800 = Dfls. 24.80 per CDR, repr. 1,000 shs., will be deducted. After 20.3.1984 the div. will only be paid under deduction of 20% Jap. tax resp. Dfls. 4.83; Dfls. 96.60 net per CDR repr. resp. 50 and 1,000 shs. each, in accordance with the Japanese tax regulations.

AMSTERDAM DEPOSITARY COMPANY N.V.
Amsterdam,
22nd November 1984.

ENTREPRISE DE RECHERCHES ET D'ACTIVITES PETROLIERES
"ERAP"

Public Corporation of the French State (Decree No. 65-1116 of December 17, 1965)

Registered Office:
7, rue Nelaton—PARIS (15ème)

9¼% BONDS 1975-1985 OF USD 1,000

Exercising the right of redemption they reserved at the time of issue, ERAP—"ENTREPRISE DE RECHERCHES ET D'ACTIVITES PETROLIERES" cancelled 510 Bonds purchased during the period of November 16, 1983 to November, 15, 1984 representing a nominal of USD 510,000.

However, during the six months following the said period, the company will have the possibility to acquire the number of bonds necessary to reach the entire nominal value provided for, i.e. USD 2,400,000.

Outstanding amount: USD 47,490,000.

BANQUE NATIONALE DE PARIS, Fiscal Agent

BANK HANDLOWY
W. Warszawie S.A.
U.S.$30 million bonds loan
1978/88 floating rate

The rate of interest applicable for the six months period beginning on 30 November 1984 and set by the Reference Agent is 10⅛% annually.

CHEMICAL NEW YORK CORP.
US$300,000,000 FLOATING RATE SENIOR NOTES DUE 1999

In accordance with the provisions of the Notes, Notice is Hereby Given that for the interest period from 30th November, 1984 to 31st December, 1984 the Notes carry an interest rate of 8⅞ per cent per annum.

The interest payable on the relevant interest payment date, 31st December 1984 against coupon no. 1 will be US$76.42 per US$10,000 Note

Agent Bank
CHEMICAL BANK

HIGSONS BREWERY PLC

NOTICE IS HEREBY GIVEN that payment of the final dividend in respect of the Ordinary Stock will be made to those Ordinary Stockholders on the Register at close of business on 12th December 1984 and will be paid on 7th February 1985, subject to approval at the Annual General Meeting on 6th February 1985.

By order of the board
H. E. THOMAS, Secretary
127 Dale Street,
Liverpool L2 2JJ.
3rd December 1984

NOTICE OF REDEMPTION

European Investment Bank

ECU 25,000,000
10% 1984/99 Bonds

Pursuant to the Terms and Conditions of the Bonds, notice is hereby given to bondholders that ECUs 1,875,000 of the European Investment Bank's 10% ECU payable Bonds of 1999 were purchased for redemption on January 5, 1985.

A drawing by lot will not take place this year.

EUROPEAN INVESTMENT BANK
Luxembourg,
November 27, 1984.

Art Galleries

RICHARD GREEN, 4, New Bond Street, W1. 01-493 3939. XIX & XX CENTURY FRENCH PAINTINGS. Daily 10-6, Sats. 10-12.30.

Clubs

EVE has outlived the others because of a policy of fair play and value for money. Supper from 10-3.30 am Disco and top musicians, glamorous hostesses, exciting floorshows. 189, Regent St. 01-734 0557.

THE GASLIGHT of St. James's. London's most exciting businessman's night-time retreat. No membership needed. Open Mon.-Fri. 8 pm-2.30 am. Sat. 9 pm-2.30 am. 2 bars, restaurant. Dozens of danceable companions, tantalising cabaret acts. Happy Hour 8-9 pm. Sat. 9-10 pm. If required superb 3-course dinner only £10.75 plus service and tax. Entrance fee £8.50 (£4.75 of this is refunded to diners ordering before 8.45 pm or 9.45 pm on Saturdays). Also now open for Naughty Lunches, 12.30 till 3.30 pm, only £7.50 inc. VAT, or a la carte. Free evening car service available. London addresses only within 3-mile radius of The Gaslight, ring for details from 10 am 4, Duke of York St., SW1. Tel: 01-930 1648/4950.

Appointments

Chief Forex Dealer

London — Salary neg. c.£35,000

The London Branch of a medium sized international banking group is looking for a Chief Foreign Exchange and Money Market Dealer.

The position entails managing three active dealers oriented mainly towards sizeable corporate clients, inter-bank foreign exchange and money market transactions, negotiable instruments etc. The successful applicant will be a member of the management team.

Applicants will be imaginative, skilful and command a good leadership and understanding of inter-group relations.

Applicants will have at least ten years' experience in various aspects of dealing in the Banking community in London, including recently adopted techniques in futures and options, and at least 3 years' experience in a very senior position.

Please write to M.J.B. Ping, quoting reference number F/974/P.

Applications are to be forwarded to our client and therefore companies in which you are not interested should be listed in a covering letter.

E&W Ernst & Whinney Management Consultants
Becket House, 1 Lambeth Palace Road, London SE1 7EU.

Contracts and Tenders

IRBID DISTRICT ELECTRICITY COMPANY LTD.
THE HASHEMITE KINGDOM OF JORDAN
OVERSEAS DEVELOPMENT ADMINISTRATION UK/JORDAN LOAN

The Irbid District Electricity Company Ltd. (IDECo) invites Tenders for the projects described below; UK goods and services will be financed under the UK loan. Costs arising in Jordan will be financed from local funds.

IRBID ELECTRIFICATION DEVELOPMENT STAGE II

The project is divided into urban and rural contracts:

IRBID URBAN CONTRACT No. 25110/01
Design, manufacture, shipment and erection of a 33/11kV substation comprising 2 x 20MVA transformers, 11kV switchgear and ancillary equipment, together with the necessary building works, approximately 2km of 33kV cable and 20km of 11kV cable ring mains and 16 x 11/0.4kV package substation units rated at 630kVA.
The contract will require complete supply and erection of all the above equipment on a turnkey basis.
Tender Document Price:
Jordanian Dinars 100 or £200 Sterling in UK

IRBID RURAL CONTRACT No. 25110/02
Materials are required CIF Aqaba for 25 rural villages comprising 25 HV/LV village substations and 5 water pump stations, 75 km of 33kV overhead line and 175 km of 0.4kV line and 1,300 house connections, namely:—

Pole-mounted 33/0.4kV transformers, feeder pillars, high-voltage fuses, steelwork, insulators, conductors, cables rated at 1,000V, kwh meters, mcbs etc. Counterweights for overhead lines.
Tender Document Price:
Jordanian Dinars 75 or £150 Sterling in UK

Tender documents are available by application in writing to Irbid District Electricity Company Ltd., PO Box 46, Irbid, The Hashemite Kingdom of Jordan, accompanied by a cheque for the appropriate JD amount, OR from Preece Cardew & Rider Ltd., Preece House, 91-103 Davigdor Road, Brighton BN3 1RE, Sussex, G.B., Consulting Engineers to Irbid District Electricity Company Ltd., on payment of the Sterling amounts, plus cost of carriage. These sums are not refundable. The application must include the appropriate contract number and project title. For UK applications a separate advice should also be sent to PCR Limited in Brighton marked for the attention of the Project Manager ref 25110/RMJ.

Tender documents will consist of three volumes, two of which are to be submitted to IDECo office in Irbid by the date and time to be stated in the covering letter accompanying tender documents. Fixed price contracts are required and tenders must be accompanied by a Bid Bond as specified in the documents, valid for four months.

IRISH INTERVENTION AGENCY
Invitation to tender for wheat as food aid

Tenders are invited for the supply in bulk of 6,036 tonnes of common wheat of breadmaking quality purchased anywhere on the market of the European Economic Community for delivery on a fob stowed and trimmed basis to an EEC port. Loading shall commence no earlier than 15th January 1985 and no later than 15th February 1985.

Tenders must be submitted by noon on Thursday 13th December 1984 to the Irish Intervention Agency, Department of Agriculture (Development Division 1), Kildare Street, Dublin 2, Ireland.

Notices of Invitation to Tender, together with tendering forms, may be obtained from the above address or on application to the Irish Embassy in London.

Telephone Nos.	Telex Nos.
Dublin—789011 (Ext. 2439/2240)	25118 Agri EI
London—01-235 2171	916104 Iverng

Department of Agriculture, Dublin, Ireland

FINANCIAL TIMES
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INTERNATIONAL & BRITISH EDITORIAL, ADVERTISEMENT & CIRCULATION OFFICES

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Buenos Aires: Editorial Edificio Sfico Piso 7, No. 74 Avenida Corrientes 456, Codigo 1366, Buenos Aires. Telex: c/o Reuters (London 24 145). Tel: 01-394 7696.

Cairo: Editorial PO Box 2040, Cairo. Tel: 751 482.

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Edinburgh: Editorial and Advertising 37 George Street, Edinburgh EH2 2HN. Telex: 72484. Tel: 031-226 4139.

Frankfurt: Editorial, Advertising and Circulation Guiollettstrasse 54, D-6000 Frankfurt-am-Main 1. Editorial Telex: 416052. Tel: 069-75980. Advertising and Circulation Telex: 416 193. Tel: 069-75980.

Geneva: Editorial, Advertising and Circulation 15 rue du Cendrier CH-1201 Geneva. Editorial Telex: 22589. Tel: 022-314 242. Advertising and Circulation Telex: 22589. Tel: 022-311 604.

Hong Kong: Editorial 7F Sutton Court, Harbour City, Kowloon. Telex: 57590 FTHKO HX. Tel: 3-722-5457. Advertising 802 Far East Exchange Building, 8 Wyndham Street Hong Kong. Telex: 60418 Wadco. Tel: 5-266-84315.

Johannesburg: Editorial 706 Union Centre West, 52 Simmonds Street, Johannesburg 2001. Telex: 8-6257. Tel: 011-838 7545.

Leeds: Advertising Permanent House, The Headrow, Leeds LS1 8DF. Tel: 0532-454969.

Lisbon: Editorial Rua do Prior 31-33, 1200 Lisbon. Telex: 12533. Tel: 019-674 406.

Madrid: Editorial Espronceda 32, Madrid 3. Telex: c/o Reuters (London 24145). Tel: 91-441 6772.

Manchester: Editorial, Advertising and Circulation Queen's House, Queen Street, Manchester M2 5HT. Telex: 666 813. Tel: 061-834 9381.

Mexico City: Editorial Calle Dinamarca 54-500, Col. Juarez, Mexico 6DF 06600. Telex: c/o Reuters (London 24145). Tel: 592 5822.

Milan: Editorial Piazza Cavour 2, Milan. Tel: 02-706 188/783 075.

New Delhi: Editorial 3 Sardar Patel Marg, Chana Kyapuri, New Delhi 110021. Telex: 81315590. Tel: 011-374 308/011-376 484.

New York: Editorial, Advertising and Circulation 14 East 60th Street, New York 10022. Editorial Telex: 66390. Tel: 0212-752 7400. Advertising and Circulation Telex: 238409. Tel: 0212-752 4500.

Paris: Editorial, Advertising and Circulation Centre d'Affaires Le Louvre, 168 Rue de Rivoli, 75044 Paris, Cedex 01. Telex: 220044. Editorial Tel: 01-297 0625/6/7/8. Advertising Tel: 01-297 0621/2. Circulation Tel: 01-297 0620/0623/0630.

Rio de Janeiro: Editorial Avenida Rio Branco 45, Salas 2611/2612, Centro CEP 20090, Rio de Janeiro RJ. Telex: 213 3593. Tel: 021-263 8845.

Rome: Editorial Via della Mercede 55, Rome. Telex: 610032. Tel: 06-678 3314.

Singapore: Editorial Times House, 390 King Seng Road, Singapore 0923. Telex: 21239. Tel: 733 2511.

Stockholm: Editorial c/o Svenska Dagbladet, Raalambsvagan 7, S-Stockholm. Telex: 17603. Tel: 08-50 60 88.

Sydney: Editorial PO Box 182, Spit Junction, Sydney. Tel: 02-20924.

Tel Aviv: Editorial 10 Bar Giora Street, Tel Aviv. Telex: 341130/341619/33779. Tel: 03-286 672.

Tokyo: Editorial 8th Floor, Nihon Keizai Shimbun Building, 1-9-5 Otemachi, Chiyoda-ku, Tokyo. Fax: 245 0358. Tel: 03-241 2920/2959. Advertising Kasahara Building, 1-6-10 Uchikanda, Chiyoda-ku, Tokyo. Telex: J27104. Tel: 03-295 4050.

Washington: Editorial Room 504, 1341G Street North West, Washington DC 20005. Telex: 440340. Tel: 0202-347 4920.

For Share Index and Business News Summary, Telephone 246 8026 (number preceded by the appropriate area code valid for London, Birmingham, Liverpool and Manchester).

All advertising is subject to the publisher's current terms and conditions, copies of which are available on request.

CONSTRUCTION CONTRACTS

Lelliott wins £11m in London

THE JOHN LELLIOTT GROUP has been awarded contracts totalling £11.5m for various projects including Universal House, Harvey Nicholls, Gloucester Hotel, Barracuda Club and Sadlers Wells.

*

MYTON has been awarded a £2m contract by Wesley Estates (part of M.E.P.C.) for the construction of about 90,000 sq ft of warehouse and industrial accommodation in Greenford, Middlesex. The nine speculative units will be constructed in two blocks, the first consisting of five warehouses with a total floor area of about 40,000 sq ft. The second block has four units with a total floor area of 15,000 sq ft. A further 35,000 sq ft is to be constructed in one unit as a distribution warehouse. The structures, comprising precast concrete and steel portal frames with power floated floors, will include profiled external cladding and metal roof sheeting. Completion is scheduled for early September 1985.

*

CRITTALL CONSTRUCTION, a member of the Norcros Group, has won a £2m contract for curtain walling for an office building in Reading—the Abbey Gardens scheme being undertaken by MEPC and Legal and General.

£6m City office block

BY JOAN GRAY, CONSTRUCTION CORRESPONDENT

MOWLEM has won a £6m contract to build a seven-storey 69,000 sq ft office block at 77-80 Gracechurch Street—in the heart of the City of London—for Land Securities, subsidiary of The City of London Real Property Company.

The contract—which Mowlem won in competitive tender—involves excavating the site to construct two levels of basement and then building the seven storeys of offices and two shops above.

The building will have a reinforced concrete frame and will be clad with Portland stone and brick.

Work starts this month for completion in August 1986, and Land Securities hopes to let the building to a bank or insurance company.

Brignell builds in Cambridge

A £1.2m private housing scheme for the retired at Arbury Road, Cambridge, is part of new work worth over £2m awarded to JOHN BRIGNELL. The contract, for 67 flats, has been placed by Anglia Secure Homes. Work on the site is due to commence this month for completion in February, 1986.

A second contract is for a £800,000 development of shops and offices at 164 to 167, East Road, Cambridge, the site of the former Marcoade, for Abbeygate Properties. The development will include an 8,000 sq. ft. ground floor for the House of Holland.

John Brignell is also involved in the fourth phase of the comprehensive house improvements scheme which Cambridge City Council is undertaking at Ditton Fields. Work covers modernisation and refurbishment of a further 32 homes.

*

BOWEY CONSTRUCTION has added £2m to its order book. In Gosforth, work has started on refurbishment of Ashleigh House for the City of Newcastle. The scheme, worth £382,000, is for a home for aged persons. At a scheme in Berwick, Bowey is building a 23,500 sq ft extension to the polychrome factory. Modernising 64 houses at Lynemouth and 17 in various villages to start for Castle Morpeth Borough Council. In Amble, Bowey is repairing Airey system-built houses on a project involving 65 homes.

Tarmac

Contracts worth over £7m have been awarded to TARMAC CONSTRUCTION. The largest, at nearly £2m, is for a warehouse at Worcester for Kay and Company. It is scheduled for completion next summer. Other projects include refurbishing a building at Petercourt, Peterborough, for Peterborough Development Corporation (£954,000); modernising 61 homes at Castle Donnington, for North-West Leicester District Council (£656,000); modernising and repairing homes at Grimley, Worcestershire, for Malvern Hills District Council (£202,000); and alterations to a workshop and the formation of a service lane at North Shields, for Northern General Transport (£278,000). In Scotland, Tarmac Cubitts—part of Tarmac Construction—has a contract, worth about £1.3m, for alterations to an existing building in North Bridge, Edinburgh, for D.C.I. (Scotland); and a £504,000 contract for a petroleum engineering building at Heriot Watt University, Edinburgh. Tarmac Cubitts also has a £338,000 project for a garage workshop and offices at Avonmouth, near Bristol, for Forden Commercials. Two other Tarmac Construction companies, Neslo Partitioning and Tarmac Refurb, also have orders. Neslo is fitting partitions at Southport Hospital (£376,000); and Tarmac Refurb has work at Park Court, Warwick Road, Coventry, for the Property Services Agency, (£777,000).

£7m for Conder

IEI SOUTHERN AND NORTHERN, mechanical and electrical building services companies of the Conder Group have secured order worth over £7.5m. The contracts are for a variety of clients ranging from the PSA, for the Navy in Rosyth, to a new head office for Townsend Thoresen Car Ferries in Portsmouth. They include a £1.6m leisure centre in Blackpool, two hotels for Hotels International Group at Basingstoke and Swansea, £1m factory for Brinton Carpets, Telford, and offices for Marconi Space and Defence Systems at Portsmouth.

*

TURRIFF CONSTRUCTION has been awarded a contract by Milton Keynes Development Corporation for the construction of a three-storey office block at Midsummer Boulevard, Milton Keynes. The contract is worth about £2.1m and work starts in January for completion by October.

APPOINTMENTS

Royal Trust of Canada appoints new chairman

THE ROYAL TRUST COMPANY OF CANADA has appointed Mr Nigel Robson as chairman. His appointment follows the retirement of Sir Francis Sandilands who has been chairman of Royal Trust for almost 10 years. Mr Robson is currently deputy chairman of the Ottoman Bank and a director of the Central Trustee Savings Bank. His other banking appointment is London adviser to the Bank of Tokyo Group. Mr Robson is also chairman of Alexander Howden Underwriting and a director of British Sugar.

*

At I. J. DEWHIRST HOLDINGS the vice chairman, Mr Michael S. Dewhirst has retired and Mr James A. R. Dewhirst becomes vice chairman. Mr Anthony Vice, N. M. Rothschild and Sons, is appointed a non-executive director. Mr Scott S. Beattie becomes financial director succeeding Mr Douglas C. McQueen who is leaving to become a financial consultant. Mr George E. Virr is retiring. Mr Tom Edge, Mr Ian R. Dewhirst and Mr Tim C. Dewhirst become joint managing directors as part of a reorganisation of the company's executive structure.

*

TERRAPIN has appointed Mr Peter Cheshire as managing director. He takes over from Mr Jack Johnson who has resigned with a view to early retirement in 1985. Mr Cheshire was deputy managing director.

*

Mr U. Magnussen has been appointed a special director of CREDIT AND GUARANTEE INSURANCE. This appointment arises as a result of his company, Svenska-Kredit, a Swedish credit insurance and guarantee company, having acquired a 25 per cent shareholding in Credit and Guarantee.

*

BARCLAYS INSURANCE SERVICES COMPANY, wholly-owned insurance broking subsidiary of Barclays Bank, has appointed Mr Peter Harwood, formerly head of accounts and automation, as head of management services. Mr Paul Wheeler has become head of education and training. He was previously district life and pensions broker for the bank's London eastern district. Mr Allan Collie, previously responsible for training, has been appointed head of staff and administration.

*

Mr Alan M. Dean, currently a main board director of N. M. Rothschild and Sons and chief executive of its Manchester office, is to join N. BROWN INVESTMENTS from January 14 as chief executive. This is a new post and carries with it the prime responsibility for the expansion of the group by acquisition. Mr Dean is resigning from the board of N. M. Rothschild on December 31.

*

At CHEMRING, Portsmouth-based manufacturer of passive anti-radar material (chaff), Mr Ian Fairfield relinquishes the post of chief executive but remains chairman. Dr David Kiely takes over as chief executive on his resignation as chief naval weapons systems engineer, a new post created in 1983 as part of the recent reorganisation of the controllerate of the navy.

*

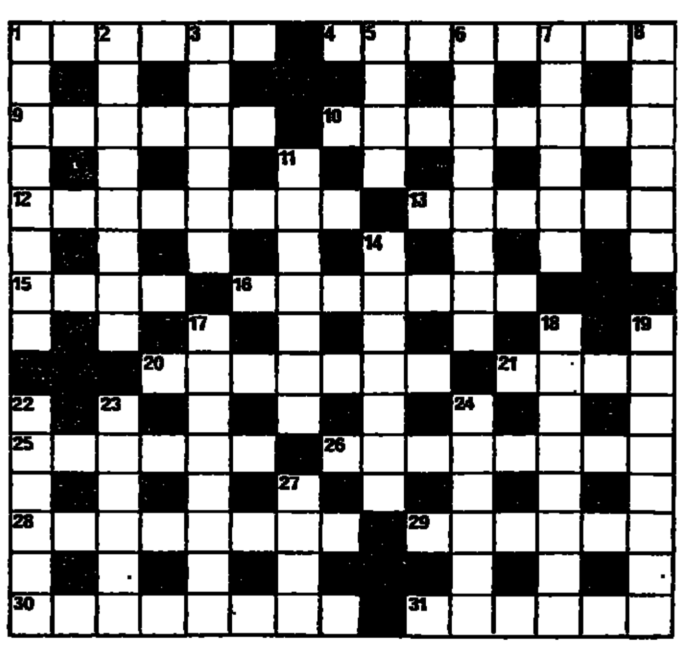
Mr Ian Wilson has been appointed director and general manager of VREDESTEIN (UK), a subsidiary of the Dutch Vredestein Group.

AUTHORISED UNIT TRUSTS

FT UNIT TRUST INFORMATION SERVICE

INSURANCES

F.T. CROSSWORD PUZZLE No. 5,585



ACROSS

1 Signal to someone left behind (6)
4 The deficit on business with the States is mammoth (8)
9 Witness noticed something moving in the park (3-3)
10 Break shower control (8)
12 How ignorant people cook poultry? (8)
13 This mechanic appears to be better (6)
15 Dines in style at several restaurants (4)
16 A memorial to waste (7)
20 Handle foreign currency reserve (7)
21 Barrel and stock of gun (4)
25 Disagree with work to be affected (6)
26 Commentator is beginning to get too old for reporting (8)
28 Cold chisel can be supplied ex stock (4, 4)
29 Deliberately loses most of the fights (6)
30 Congress make reference to turnover of food (8)
31 Ground is harshly criticised after start of game (6)

DOWN

1 Director of Intelligence makes trouble (8)
2 Plays back as centre in new formation (2-6)
3 Horace cooked this plant instead of spinach (6)
5 In Rome no one put up writing on the wall (4)
6 Completely unconscious? Correct (8)
7 This part at the end includes the old city (6)
8 Divers need something warm and watertight (6)
11 A very small part in any scientific study (7)
14 Fight over space available for storage (3-4)
17 It's murder in the service area (8)
18 Organise a contest for a car (8)
19 Returned desserts: put weight on (8)
22 Prohibited from supporting evil (6)
23 Well turned out in the wood (6)
24 We end up with the right animal (6)
27 In France, a measurement of dress length (4)

The solution to last Saturday's prize puzzle will be published with names of winners next Saturday.

هكذا عن الاصل

هكذا من الأصل

INSURANCE, OVERSEAS & MONEY FUNDS

OFFSHORE AND OVERSEAS

West Avon Secs (Guernsey) Ltd
Borough Hse. St Peter Port. Guernsey. 0481 27963

U.S. & Opt.	$0.95	1.00	....	—
Gilt&OptFd	£1.19	1.24	....	5.20

World Wide Growth Management
10a, Boulevard Royal. Luxembourg.

WwdGthFd	$11.42	—	−0.07	—

Inv. Adv.: M&G Inv. Mngt. Ltd., London.

Wren Commodity Management Ltd
10, St George's St. Douglas, IoM. 0624 25015

Wren Com Fd	12.8	13.3	....	3.10
Chinese Fd	59.9	62.4	....	1.70
PrecMedFd	122.7	127.8	....	8.30
VangCmdyFd	25.0	25.7	−0.8	—
FinFuturesFd	32.4	33.8	....	—

Yamaichi Dynamic Mngt Co SA
10a Boulevard Royal. Luxembourg.

DynamicGth Fd	39.18	−0.12	—

Money Market Trust Funds

	Nom	Apr	Int Cr	Notice
The Money Market Trust				
63 Qn Victoria St. EC4		4ST.	01-236	0952
Call Fund	9.39	9.64	6mth	Call
7-day Fund	9.91	10.25	6mth	7-day
Oppenheimer Money Management Ltd				
66 Cannon St. EC4N 6AE.			01-236	1425
Call Fund	8.96	9.16	6mth	Call
7-day Fund	9.38	9.59	6mth	7-day
MnyMngAc	8.875	9.175	3mth	Call
Dollar	7.50	7.64	6mth	2-day

Money Market Bank Accounts

	Nom	Apr	Int Cr	Notice
Aitken Hume				
30 City Road. EC1Y 2AY.			01-638	6070
TreasuryAcc	9.625	9.98	Qtr	Call
Mth Int Chq	9.625	10.05	Mth	Call
Bank of Scotland				
38 Threadneedle St. EC2P 2EH.			01-628	8060
Cheque Acc	9.20	9.60	Mth	Call
Barclays Prime Account				
PO Box 125, Northampton.			0604	252891
High Int Chq	9.25	9.57	Qtr	Call
Britannia Grp of Investment Companies				
29 Finsbury Circ, EC2M 5QL.			01-535	2777
Cater Allen	9.50	9.930	Mth	Call
Charterhouse Japhet plc				
1 Paternoster Row, EC4M 7DH.			01-248	3999
Sterling	9.50	9.92	Mth	Call
U.S. Dollar	8.50	8.96	Mth	Call
German Marks	5.0	5.19	Mth	Call
Swiss Franc	2.0	2.05	Mth	Call
Japanese Yen	5.0	5.19	Mth	Call
Choulartons				
30 Ashley Rd, Altrincham, Cheshire, WA1 2DW.			061-928	9011
Cheque Acc	10.25	10.75	Mth	Call
Co-operative Bank				
78-80 Cornhill EC3.			01-626 6543	Ext 464
Over£1,000	8.00	8.24	Qtr	Call
Over£1,000	10.00	10.38	Qtr	Call
Dartington & Co Ltd				
Dartington, Totnes, Devon, TQ9 6JE.			0803	862271
MnyMktAcc	9.50	9.84	Qtr	Call
Henderson/Bank of Scotland				
38 Threadneedle St, EC2P.			01-628	8060
MnyMktChqAcc	9.20	9.60	Mth	Call
Lombard North Central plc				
17 Bruton St. W1A 3DH.			01-409	3434
Notice Dep	9.875	10.12	Rate	14-day
M & G Kleinwort Benson				
91-99 New London Rd, Chelmsford.			0245	51651
HighInChkAc	9.26	9.70	Daily	Call
Midland Bank plc				
PO Box 2, Sheffield.			0742 20999	Ext 8738
High Int Chq	9.50	9.84	Qtr	Call
Save & Prosper/Robert Fleming				
28 Western Rd, Romford, RM1 3LB.			0708	66966
HighIntMktAc	9.00	9.41	Daily	Call
PremierAcc	9.00	9.41	Daily	Call
Tyndall & Co				
29-33 Princess Victoria St, Bristol BS8 4BX			0272	732241
Demand Acc	9.32	9.66	Qtr	Call
Money Acc	9.375	9.71	Qtr	Chq 7
J. Henry Schroder Wagg & Co Ltd				
Enterprise House, Portsmouth.			0705	827733
SpecialAcc	9.25	9.65	Mth	Call
Over£10,000	9.50	9.87	Mth	Call

NOTES—Interest rates given both as a nominal rate and an annual percentage rate adjusted for frequency of interest credit.

NOTES

Prices are in pence unless otherwise indicated and those designated $ with no prefix to U.S. dollars. Yields % (shown in last column) allow for all buying expenses. a Offered prices include all expenses. b Today's prices. c Yield based on offer price. d Estimated. g Today's opening price. h Distribution free of UK taxes. p Periodic premium insurance plans. s Single premium insurance. x Offered price includes all expenses except agent's commission. y Offred prices includes all expenses if bought through managers. z Previous day's price. ¶ Guernsey gross. ‡ Suspended. ◆ Yield before Jersey tax. † Ex-subdivision. ‡‡ Only available to charitable bodies. ◎ Yield column shows annualised rates of NAV increase.

FT LONDON SHARE INFORMATION SERVICE

BRITISH FUNDS

"Shorts" (Lives up to Five Years)

Interest Due		Stock	Price £	Last xd	Yield Int.	Yield Red.
22 Aug	22 Feb	Treas. 15pc 1985	101 1/4	16.7	14.85	9.63
22 Sep	22 Mar	Exch. 12pc Cnv. '85	100 5/8	16.8	11.93	9.78
21 Nov	21 May	Treas 3pc 1985	97	15.10	3.09	9.79
15Jan	15Jul	Treas 11 1/2pc 1985	100 13/16	8.6	11.39	9.75
3 Mar	3 Sep	Treas 8 3/4pc Cnv '85	99 1/4	30.7	8.82	9.82
22 May	22 Nov	Exch. 12 1/4pc 1985	102 1/4	16.10	11.99	9.82
25 Aug	25 Feb	Exch. 11 3/4pc '86	101 13/16	9.95	11.53	9.94
11Oct	11Apr	Treas. 10pcCnv 1986	100 1/4	4.9	9.99	9.92
19 Nov	19 May	Treas 3pc 1986	92 13/16	15.10	3.23	8.25
19 Nov	19 May	Exch. 10 1/2pc Cv '86	100 3/4	15.10	10.42	9.95
12Dec	12Jun	Treas 12pc 1986	102 3/4xd	5.11	11.68	10.03
10 Jan	10 Jul	Treas 8 1/4pc 1984-86‡‡	97 11/16	4.6	8.69	9.99
29 Apr	29 Oct	Exch. 14pc 1986	106 1/4	24.9	13.15	10.17
21 May	21 Nov	Exch. 2 1/2pc 1986	88 13/16xd	15.10	2.81	8.82
22Jul	22Jan	Exch. 13 1/4pc 1987	105 1/4	15.6	12.57	10.29
10 Aug	10 Feb	Treas 10 1/4pcCv '87	99 3/4	4.7	10.28	10.33
24Aug	24Feb	Exch 2 1/2pc 1987	87 1/4	18.7	2.86	8.74
6Oct	6Apr	Exch. 10 1/2pc 1987	100 1/4	3.9	10.47	10.33
1 Nov	1 May	Funding 6 1/2pc '85-87‡‡	92 1/4	25.9	7.02	10.05
12Dec	12Jun	Treas. 10pc 1987	99 1/4xd	5.11	10.08	10.36
14Jan	14Jly	Treas 3pc 1987	85 11/16	9.58	3.50	9.23
3May	3Nov	Treas. 12pc 1987	103 5/8	27.9	11.58	10.51
26 Jul	26 Jan	Treas 7 3/4pc 1985-88‡‡	93 1/4	19.6	8.31	10.26
10Nov	10May	Exch 10 1/2pc '88	99 13/16	4.10	10.51	10.53
14Dec	14Jun	Treas. 9 3/4pc Cv '88	97 1/4xd	7.11	10.01	10.67
1Jan	1Jul	Transport 3pc '78-88	81 1/2xd	25.5	3.68	9.20
25 Apr	25 Oct	Treas. 9 1/2pc '88	96 1/4	18.9	9.88	10.73
22 Aug	22 Feb	Treas 11 1/2pc 1989	102 1/4	16.7	11.25	10.79
18 Oct	18 Apr	Treas 9 1/2pc Cnv. '89	96 1/4	11.9	9.88	10.60
14Dec	14Jun	Treas 10 1/2pc 1989	99 1/4xd	7.11	10.59	10.74
1Feb	1Aug	Exch 10pc 1989	96 13/16	25.6	10.32	10.84

Five to Fifteen Years

Over Fifteen Years

Undated

Index-Linked

INT. BANK AND O'SEAS GOVT STERLING ISSUES

CORPORATION LOANS

COMMONWEALTH AND AFRICAN LOANS

LOANS

Building Societies

Public Board and Ind.

Financial

FOREIGN BONDS & RAILS

AMERICANS

CANADIANS

BANKS, HP AND LEASING

Hire Purchase, Leasing, etc.

BEERS, WINES AND SPIRITS

BEERS, WINES—Cont.

BUILDING INDUSTRY, TIMBER AND ROADS

CHEMICALS, PLASTICS

DRAPERY AND STORES

DRAPERY & STORES—Cont.

ELECTRICALS

ENGINEERING

ENGINEERING—Continued

FOOD, GROCERIES, ETC

HOTELS AND CATERERS

HOTELS—Continued

INDUSTRIALS (Miscel.)

هكذا من الأصل

INDUSTRIALS—Continued

INSURANCES

LEISURE

LEISURE—Continued

MOTORS, AIRCRAFT TRADES

Motors and Cycles

Commercial Vehicles

Components

Garages and Distributors

NEWSPAPERS, PUBLISHERS

PAPER, PRINTING ADVERTISING

PROPERTY

PROPERTY—Continued

SHIPPING

SHOES AND LEATHER

SOUTH AFRICANS

TEXTILES

TOBACCOS

TRUSTS, FINANCE, LAND

Investment Trusts

INVESTMENT TRUSTS—Cont.

Finance, Land, etc

OIL AND GAS

OIL AND GAS—Continued

OVERSEAS TRADERS

PLANTATIONS

Rubbers, Palm Oil

Teas

MINES

Central Rand

Eastern Rand

Far West Rand

O.F.S.

Finance

Diamond and Platinum

MINES—Continued

Dividends Paid		Stock	Price	Last xd	Div Net	C'vr	Y'ld Gr's
		Central African					
Jan	June	Falcon Z50c	150	29.10	Q100c	♦	38.9
Nov.	May	Wankie Col. Z$1	9¼	25.4	—	—	—
October		Zam.Cpr.SBD0.24	14¼	9'80	—	—	—
		Australians					
—		♥ACM 50c	52	—	—	—	—
—		♥Allstate Expl'n. NL	31	—	—	—	—
—		♥Asia Oil & Minerals	4¼	—	—	—	—
—		♥Aust. Hydrocarbons NL	39	—	♦	—	—
—		♥Australis Mng N.L.	14½	—	—	—	—
—		♥Balmoral Res	19	—	—	—	—
—		♥Black Hill Min.	21	—	—	—	—
December		♥Bond Corp	120	—	Q10c	♦	6.0
Nov.	Apr.	♥Bougainville 1 Kina	121	11.3	‡Q16.4c	1.2	‡
May	Nov	♥CRA $2	362	11 3	†Q12c	1.5	2.3
—		♥Carr Boyd 20c	64	—	—	—	—
—		♥Central Kalgoorlie	26	—	—	—	—
—		♥Central Pacific	32	—	—	—	—
—		♥Cons Gld Mg Areas NL	3½	—	—	—	—
—		♥Coopers Res. NL	6	—	—	—	—
—		♥Coltas Pac NL	8¼	—	—	—	—
—		♥Eagle Corp 10c	6¼	5 9	—	—	—
—		♥Emperor Mines	192	—	—	—	—
—		♥Emu Hill Gold N.L.	10	—	—	—	—
—		♥Endeavour 20c	12½	—	—	—	—
—		♥Enterprise Gld	29	—	—	—	—
—		♥Forsayth Oil Gas	23	—	—	—	—
—		♥Gem Exp & Minerals	56	—	—	—	—
Apr	Oct	♥GM Kalgoorlie 25c	440	28.9	Q30c	♦	4.8
—		♥Great Eastern Mns.	17½	—	—	—	—
—		♥Great Victoria Gold	38	—	—	—	—
—		♥HMC Aust NL 20c	7	—	—	—	—
—		♥Haoma NW	11	—	—	—	—
—		♥Hill Minerals N.L.	30	17.10	—	—	—
—		♥Indian Ocean (1982)	32	—	—	—	—
—		♥Ivanhoe Gld NL	5½	—	—	—	—
—		♥Jingellic Mns	41	—	—	—	—

Tins

Miscellaneous

Dividends Paid		Stock	Price	Last xd	Div Net	C'vr	Y'ld Gr's
—		♥Anglo Utd. Dev.	35	—	—	—	—
—		♥Centennial Min'ls.	310	26.3	—	—	—
—		♥Colby Res Corp	85	—	—	—	—
Aug.	Feb.	Cons. Murch. 10c	675	16.7	†Q100c	1 4	6.5
—		+Emess Int Ir10p	31	—	—	—	—
Sept	Feb	Hampton Areas 10p	163	30.7	3.75	2.1	3.1
—		♥Highwood Res.	185	—	—	—	—
May	Aug	Homestake Mining $1	£20¼	31.10	Q20c	—	0.5
—		♥McFinley Red Lake	240	—	—	—	—
—		♥Minoo Explorations	195	—	—	—	—
—		♥New Sabina Res C$1	30	—	—	—	—
October		Northgate C$1	295	9'77	—	—	—
Jan.	July	RTZ	600	29.10	†18.0	2.7	4.3
Jan	July	Do. 9½pcLn '95-2000	£132½	29.10	Q9½%	35.4	†7.4
—		♥Tara Expln $1	918	—	—	—	—

NOTES

Unless otherwise indicated, prices and net dividends are in pence and denominations are 25p. Estimated price/earnings ratios and covers are based on latest annual reports and accounts and, where possible, are updated on half-yearly figures. P/Es are calculated on "net" distribution basis, earnings per share being computed on profit after taxation and unrelieved ACT where applicable; bracketed figures indicate 10 per cent or more difference if calculated on "nil" distribution. Covers are based on "maximum" distribution; this compares gross dividend costs to profit after taxation, excluding exceptional profits/losses but including estimated extent of offsetable ACT. Yields are based on middle prices, are gross, adjusted to ACT of 30 per cent and allow for value of declared distribution and rights.

- ● "Tap Stock".
- ●+ Highs and Lows marked thus have been adjusted to allow for rights issues for cash.
- † Interim since increased or resumed.
- ‡ Interim since reduced, passed or deferred.
- ‡‡ Tax-free to non-residents on application.
- ♦ Figures or report awaited
- ♥ Not officially UK listed; dealings permitted under Rule 535(4)(a).
- + USM; not listed on Stock Exchange and company not subjected to same degree of regulation as listed securities.
- †† Dealt in under Rule 535(3).
- # Price at time of suspension
- ¶ Indicated dividend after pending scrip and/or rights issue. cover relates to previous dividend or forecast.
- ♦ Merger bid or reorganisation in progress.
- ♦ Not comparable.
- ♦ Same interim: reduced final and/or reduced earnings indicated
- ♦ Forecast dividend; cover on earnings updated by latest interim statement.
- ‡ Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividend.
- ‡ Cover does not allow for shares which may also rank for dividend at a future date. No P/E value usually provided.
- ¶ No par value.

B.Fr. Belgian Francs. Fr. French Francs. ¶¶ Yield based on assumption Treasury Bill Rate stays unchanged until maturity of stock. a Tax free. b Figures based on prospectus or other offer estimate. c Cents. d Dividend rate paid or payable on part of capital, cover based on dividend on full capital. e Redemption yield. f Flat yield. g Assumed dividend and yield. h Assumed dividend and yield after scrip issue. j Payment from capital sources. k Kenya. m Interim higher than previous total. n Rights issue pending. q Earnings based on preliminary figures. s Dividend and yield exclude a special payment. t Indicated dividend: cover relates to previous dividend, P/E ratio based on latest annual earnings. u Forecast dividend. cover based on previous year's earnings. v Subject to local tax. x Dividend cover in excess of 100 times. y Dividend and yield based on merger terms. z Dividend and yield include a special payment: Cover does not apply to special payment. A Net dividend and yield. B Preference dividend passed or deferred. C Canadian. E Minimum tender price. F Dividend and yield based on prospectus or other official estimates for 1983-84. G Assumed dividend and yield after pending scrip and/or rights issue. H Dividend and yield based on prospectus or other official estimates for 1984. K Figures based on prospectus or official estimates for 1984. M Dividend and yield based on prospectus or other official estimates for 1985-86. N Dividend and yield based on prospectus or other official estimates for 1985. P Figures based on prospectus or other official estimates for 1983. Q Gross. T Figures assumed. Z Dividend total to date.

Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xd ex capital distribution.

REGIONAL & IRISH STOCKS

The following is a selection of Regional and Irish stocks, the latter being quoted in Irish currency.

Albany Inv 20p	86	.....	Arnott	250	-5
Craig & Rose £1	£11xd	.....	CPI Hldgs	49	.....
Finlay Pkg. 5p	42	.....	Carroll Inds.	119	.....
Higsons Brew	85xd	.....	Dublin Gas	65	.....
Holt (Jos) 25p	890	.....	Hall (R. & H.)	40	+2
IoM Stm. £1	107	.....	Heiton Hldgs.	15½	+½
IRISH			Irish Ropes	35	.....
Exch. 12% 1985	£98¾	.....	Jacob (W.& R.)	65	.....
Nat. 9¾% 84/89	£82½	.....	TMG	67	.....
Fin. 13% 97/02	£85⅝	.....	Unidare	80	.....

OPTIONS — 3-month call rates

Debenhams	19	Racal Elect	24	Charterhall	6
Distillers	24	RHM	10	Premier	6
Dunlop	5	Rank Org Ord	24	Shell	55
FNFC	7	Reed Intnl	50	Tricentrol	22
Gen Accident	42	Sears	7	Ultramar	22
Gen Electric	20	TI	18		
Glaxo	90	Tesco	8	**Mines**	
Grand Met	26	Thorn EMI	42	Charter Cons	21
GUS 'A'	55	Trust Houses	12	Cons Gold	42
Guardian	58	Turner Newall	9	Lonrho	14
GKN	16	Unilever	80	Rio T Zinc	60

A selection of Options traded is given on the London Stock Exchange Report page.

"Recent Issues" and "Rights" Page 16

CURRENCIES, MONEY and CAPITAL MARKETS

FINANCIAL FUTURES

LONDON

THREE-MONTH EURODOLLAR $1m points of 100% — [illegible]

THREE-MONTH STERLING £250,000 points of 100% — [illegible]

20-YEAR 12% NOTIONAL GILT £50,000 32nds of 100% — [illegible]

STERLING £25,000 $ per £ — [illegible]

DEUTSCHE MARKS DM 125,000 $ per DM — [illegible]

SWISS FRANCS SwFr 125,000 $ per SwFr — [illegible]

FT-SE 100 INDEX £25 per full index point — [illegible]

U.S. TREASURY BONDS 8% $100,000 32nds of 100% — [illegible]

CHICAGO

U.S. TREASURY BONDS (CBT) 8% $100,000 32nds of 100% — [illegible]

U.S. TREASURY BILLS (IMM) $1m points of 100% — [illegible]

CERT. DEPOSIT (IMM) $1m points of 100% — [illegible]

THREE-MONTH EURODOLLAR (IMM) $1m points of 100% — [illegible]

STERLING (IMM) Se per £ — [illegible]

GNMA (CBT) 8% $100,000 32nds of 100% — [illegible]

WEEKLY CHANGE IN WORLD INTEREST RATES

	Nov. 30	change		Nov. 30	change
LONDON Base rates; 7 day Interbank; 3mth Interbank; Treasury Bill Tender; Band 1 Bills; Band 2 Bills; Band 3 Bills; 3 Mth. Treasury Bills; 1 Mth. Bank Bills; 3 Mth. Bank Bills	[illegible]	[illegible]	NEW YORK Prime rates; Federal funds; 3 Mth. Treasury Bills; 6 Mth. Treasury Bills; 3 Mth. CD	[illegible]	[illegible]
TOKYO One month Bills; Three month Bills	[illegible]	[illegible]	FRANKFURT Lombard; One Mth. Interbank; Three month	[illegible]	[illegible]
BRUSSELS One month; Three month	[illegible]	[illegible]	PARIS Intervention Rate; One Mth. Interbank; Three month	[illegible]	[illegible]
AMSTERDAM One month; Three month	[illegible]	[illegible]	MILAN One month; Three month	[illegible]	[illegible]
			DUBLIN One month; Three month	[illegible]	[illegible]

London—band 1 bills mature in up to 14 days, band 2 bills 15 to 33 days, and band 3 bills 34 to 63 days. Rates quoted represent Bank of England buying or selling rates with the money market. In other centres rates are generally deposit rates in the domestic money market and their respective changes during the week. Band 4 bills 9⅝.

FOREIGN EXCHANGES

Dollar in sight of new ground

BY COLIN MILLHAM

Market perception of the dollar's future movements has changed quite dramatically during the last few weeks. About a month ago the U.S. currency was seen to be entering a period of weakness, as economic growth slowed and interest rates fell, but once again it seems to have proved a false dawn, and dealers are now talking about new records for the dollar.

At the time the dollar was falling Dr Henry Kaufman of Salomon Brothers warned of higher interest rates in 1985. No one is really thinking in terms of higher rates at present, following recent cuts in the Federal Reserve discount rate and commercial bank prime lending rates, while during November there were three cuts in UK clearing bank base rates and the rest of Europe is expected to lower rates in line with the U.S.

The only problem with this line of thought is that the market's love affair with the dollar is likely to make European central banks think twice about cutting rates. At one time it was hoped the German Bundesbank might cut its Lombard rate at last week's council meeting, but by the time the meeting took place there was no surprise when credit policies were left unchanged.

At the beginning of the week DM 3.07 was seen as a possible target for the dollar, compared with a close of DM 3.0290 on the previous Friday. By mid-week the target was raised to DM 3.09, and in late trading on Friday the currency surged well above DM 3.10, and soon afterwards in New York was trading at DM 3.1150.

A fall of 0.7 per cent in U.S. October leading indicators, announced during the week, was close enough to expectations to have little impact. But the October trade deficit of $9.18bn was much lower than anticipated, and compared with $12.65bn in September, while the rise of $6.7bn in weekly M1 money supply was considerably above the forecast increase of around $2bn and gave the dollar an added boost.

The Bundesbank has been very reserved with its scale of intervention recently, but the main fear now is that the German central bank will watch as the market pushes the dollar well above the previous trading peak of DM 3.1765 and then hit it very hard, in much the same way as in September.

STERLING EXCHANGE RATE INDEX

	Nov 30	Previous
8.30 am	74.4	74.5
9.00 am	74.5	74.5
10.00 am	74.7	74.4
11.00 am	74.7	74.4
Noon	74.6	74.5
1.00 pm	74.6	74.5
2.00 pm	74.7	74.5
3.00 pm	74.7	74.4
4.00 pm	74.9	74.3

£ in New York

	November 30	Prev. close
£ Spot	$1.1960-1.1970	$1.2005-1.2015
1 month	0.08-0.07 pm	0.10-0.09 pm
3 months	0.12-0.10 pm	0.18-0.16 pm
12 months	0.36-0.46 dis	0.18-0.21 dis

Forward premiums and discounts apply to the U.S. dollar.

FORWARD RATES AGAINST STERLING

	Spot	1 month	3 month	6 month	12 month
Dollar	1.1980	1.1973	1.1969	1.1975	1.2015
D-Mark	3.7125	3.7001	3.6768	3.6396	3.5719
French Franc	11.3650	3.7228	3.6774	3.6220	3.5027
Swiss Franc	3.06	3.0495	3.0263	2.9922	2.9263
Japanese Yen	296.50	295.73	294.17	291.75	287.10

POUND SPOT—FORWARD AGAINST POUND

Nov 30	Day's spread	Close	One month	% p.a.	Three months	% p.a.
U.S.	1.1945-1.2045	1.1975-1.1985	0.09-0.06c pm	0.75	0.14-0.09 pm	0.38
Canada	1.5820-1.5890	1.5860-1.5870	0.14-0.23c dis	−1.40	0.38-0.52dis	−1.13
Nethlnd.	4.17¼-4.21	4.18-4.19	1⅝-1¼c pm	4.12	4⅛-3⅞ pm	3.70
Belgium	74.43-74.95	74.50-74.60	4-9c dis	−1.05	13-22 dis	−0.94
Denmark	13.32-13.41	13.37-13.38	2-2⅞ore dis	−2.13	6¾-7½ dis	−2.13
Ireland	1.1947-1.2000	1.1990-1.2000	0.44-0.60p dis	−5.20	1.42-1.67dis	−5.15
W. Ger.	3.69½-3.73¼	3.70¾-3.71¾	1⅝-1½pf pm	4.85	3¾-3½ pm	3.90
Portugal	197.25-200.90	197.65-200.25	195-620c dis	−24.57	575-1720dis	−23.06
Spain	206.50-207.70	206.55-206.75	30-50c dis	−2.32	145-170 dis	−3.05
Italy	2289¾-2304½	2291¾-2292¾	6-10lire dis	−4.19	24-31 dis	−4.80
Norway	10.69-10.75	10.72-10.73	1⅞-2⅞ore dis	−2.52	6¾-7⅞ dis	−2.61
France	11.32¾-11.42½	11.36-11.37	⅜-1⅛c dis	−0.99	3-4⅞ dis	−1.25
Sweden	10.52-10.59½	10.55¾-10.56¾	1¾-2¼ore dis	−2.27	5½-6 dis	−2.18
Japan	294¾-298	296-297	0.84-0.76y pm	3.24	2.42-2.29 pm	3.18
Austria	25.98-26.19	26.04-26.09	5⅛-4⅛gro pm	2.16	13⅞-10¾ pm	1.87
Switz.	3.04-3.07	3.05½-3.06½	1⅜-1c pm	4.65	3⅝-3⅜ pm	4.49

Belgian rate is for convertible francs. Financial franc 74.75-74.85. Six-month forward dollar 0.08-0.03c pm. 12-month 0.30-0.45c dis.

OTHER CURRENCIES

Nov. 30	£	$		£ Note Rates
Argentina Peso	177.20-177.50	147.55-147.67	Austria	26.00-26.30
Australia Dollar	1.4020-1.4040	1.1655-1.1660	Belgium	74.65-75.45
Brazil Cruzeiro	3,378.61-3,399.26	2,814-2,828	Denmark	13.32-13.47
Finland Markka	7.7203-6.4210	6.4210-6.4230	France	11.33-11.45
Greek Drachma	149.81-152.84	125.22-127.74	Germany	3.69¾-3.74¾
HongKong Dollar	9.4050-9.4150	7.8235-7.8265	Italy	2270-2310
Iran Rial	111.45*	92.45*	Japan	292-297
KuwaitDinar KD	0.36405-0.36450	0.30290-0.30300	Netherlands	4.17¼-4.21¼
Luxembourg Fr.	74.50-74.60	62.45-62.55	Norway	10.68-10.79
Malaysia Dollar	2.8970-2.9030	2.4105-2.4125	Portugal	200-210
New Zealand Dlr.	2.4665-2.4715	2.0505-2.0535	Spain	202¾-218¼
Saudi Arab Riyal	4.3785-4.3845	3.5605-3.5615	Sweden	10.52-10.63
Singapore Dollar	2.6060-2.6120	2.1665-2.1685	Switzerland	3.04-3.07
Sth African Rand	2.2196-2.2296	1.8535-1.8585	United States	1.19-1.21
U.A.E. Dirham	4.4135-4.4190	3.6720-3.6730	Yugoslavia	275-300

* Selling rates.

EMS EUROPEAN CURRENCY UNIT RATES

	Ecu central rates	Currency amounts against Ecu November 30	% change from central rate	% change adjusted for divergence	Divergence limit %
Belgian Franc	44.9008	44.9108	+0.02	+0.24	±1.5428
Danish Krone	8.14104	8.04526	−1.18	−0.96	±1.6421
German D-Mark	2.24184	2.23327	−0.38	−0.16	±1.1463
French Franc	6.87456	6.84273	−0.46	−0.24	±1.3659
Dutch Guilder	2.52595	2.51911	−0.27	−0.05	±1.5165
Irish Punt	0.72569	0.718932	−0.93	−0.71	±1.6671
Italian Lira	1403.49	1382.06	−1.53	−1.63	±4.0511

Changes are for Ecu, therefore positive change denotes a week currency. Adjustment calculated by Financial Times.

BANK OF ENGLAND TREASURY BILL TENDER

	Nov. 30	Nov. 23		Nov. 30	Nov. 23
Bills on offer	£100m	£100m	Top Accepted rate of discount	9.0648%	8.9258%
Total of applications	£359m	£313.125m	Average rate of discount	9.0569%	9.0066%
Total allocated	£100m	£100m	Average yield	9.27%	9.21%
Minimum accepted bid	£97.74	£97.75	Amount on offer at next tender	£100m	£100m
Allotment at minimum level	61%	21%			

DOLLAR SPOT—FORWARD AGAINST DOLLAR

Nov 30	Day's spread	Close	One month	% p.a.	Three months	% p.a.
UK†	1.1945-1.2045	1.1975-1.1985	0.09-0.06c pm	0.75	0.14-0.09 pm	0.38
Ireland†	0.9990-1.0045	0.9990-1.0005	0.52-0.47c pm	5.92	1.38-1.28 pm	5.30
Canada	1.3219-1.3237	1.3222-1.3227	0.22-0.25c dis	−2.13	0.48-0.53dis	−1.53
Nethlnd.	3.4860-3.4995	3.4895-3.4905	0.96-0.93c pm	3.25	2.87-2.84 pm	3.27
Belgium	62.22-62.60	62.45-62.55	9½-11c dis	−1.97	20-23 dis	−1.38
Denmark	11.13¼-11.17¾	11.16¾-11.17¾	2-2½ore dis	−2.42	5¾-6½ dis	−2.20
W. Ger.	3.0890-3.1060	3.1040-3.1050	0.87-0.82pf pm	3.27	2.69-2.64 pm	3.44
Portugal	165-167	165-167	175-525c dis	−25.30	500-1450dis	−23.49
Spain	172.35-172.88	172.55-172.75	50-60c dis	−3.82	140-160 dis	−3.48
Italy	1913½-1918	1916-1917	8½-9lire dis	−5.48	24¼-25¼ dis	−5.17
Norway	8.93½-8.95¾	8.95¼-8.95¾	3.00-3.50ore dis	−4.37	8.30-8.80dis	−3.83
France	9.46¾-9.49	9.48¾-9.49¾	1.40-1.50c dis	−1.83	3.80-4.10dis	−1.66
Sweden	8.80½-8.82½	8.81¾-8.82¼	2.05-2.55ore dis	−3.13	5.50-6.00dis	−2.61
Japan	246.55-247.45	247.35-247.45	0.53-0.49y pm	2.48	1.74-1.69 pm	2.78
Austria	21.71-21.79	21.75-21.77	2.70-2.00gro pm	1.30	9.00-7.00 pm	1.47
Switz.	2.5355-2.5530	2.5520-2.5530	0.84-0.79c pm	3.82	2.61-2.56 pm	4.05

† UK and Ireland are quoted in U.S. currency. Forward premiums and discounts apply to the U.S. dollar and not to the individual currency. Belgian rate is for convertible francs. Financial franc 62.40-62.50.

CURRENCY MOVEMENTS

Nov 30	Bank of England Index	Morgan Guarant'y Changes%
Sterling	74.9	−15.6
U.S. dollar	142.9	+29.3
Canadian dollar	90.0	−3.6
Austrian schilling	110.6	+3.4
Belgian franc	88.6	−10.9
Danish Kroner	76.1	−5.9
Deutsche mark	120.6	+5.9
Swiss franc	140.2	+9.8
Guilder	110.6	+3.1
French franc	63.8	−16.5
Lira	46.6	−14.1
Yen	156.4	+12.1

Morgan Guaranty changes: average 1980-1982=100. Bank of England Index (base average 1975=100).

CURRENCY RATES

Nov. 30	Bank rate %	Special Drawing Rights	Europ'n Currency Unit
Sterling	—	0.824869	0.601266
U.S. $	8½	0.989348	0.721807
Canadian $	10.75	*	0.954374
Austria Sch.	4½	21.5421	15.6921
Belgian Fr.	11	61.5958	44.9108
Danish Kr.	7	11.0337	8.04586
Dmark	4½	3.06332	2.23327
Guilder	5	3.45431	2.51911
French Fr.	9½	9.38792	6.84273
Lira	16½	1890.40	1382.08
Yen	5	243.676	178.950
Norwgn Kr.	8	8.84477	6.44754
Spanish Pta.	½	170.953	124.612
Swedish Kr.	9	8.70874	6.35804
Swiss Fr.	4	2.51858	1.83678
Greek Dr'ch	20½	125.301	91.2870
Irish Punt	12¾	0.985697	0.718932

*C$/SDR rate for November 19 1.31110.

EXCHANGE CROSS RATES

Nov. 30	Pound St'rling	U.S. Dollar	Deutsche m'k	J'panese Yen	French Franc	Swiss Franc	Dutch Guild	Italian Lira	Canada Dollar	Belgian Fran
Pound Sterling	1.	1.198	3.713	296.5	11.37	3.060	4.186	2292.	1.587	74.65
U.S. Dollar	0.835	1.	3.105	247.4	9.490	2.553	3.490	1917.	1.324	62.50
Deutchemark	0.269	0.323	1.	79.87	3.061	0.824	1.127	617.4	0.427	20.08
Japanese Yen 1,000	3.373	4.040	12.52	1000.	38.33	10.32	14.11	7731.	5.351	251.4
French Franc 10	0.880	1.054	3.267	260.9	10.	2.692	3.682	2017.	1.396	65.60
Swiss Franc	0.327	0.392	1.213	96.90	3.714	1.	1.368	749.1	0.518	24.36
Dutch Guilder	0.239	0.286	0.887	70.85	2.716	0.731	1.	547.7	0.379	17.81
Italian Lira 1,000	0.436	0.523	1.620	129.3	4.958	1.335	1.826	1000.	0.692	32.52
Canadian Dollar	0.630	0.755	2.340	186.9	7.164	1.929	2.638	1446.	1.	46.99
Belgian Franc 100	1.341	1.607	4.980	397.7	15.24	4.105	5.614	3075.	2.128	100.

EURO-CURRENCY INTEREST RATES (Market closing rates)

Nov. 30	Sterling	U.S. Dollar	Canadian Dollar	Dutch Guilder	Swiss Franc	D-mark	French Franc	Italian Lira	Belgian Franc Conv.	Belgian Franc Fin.	Yen	Danish Krone
Short term	9⅝-9⅞	8 1/16-8 3/16	11¼-11⅝	5½-5⅝	⅞-1⅛	5½-5⅝	11-11⅛	14-15	10¾-11¼	10¾-11	6⅜-6½	11¼-11¾
7 days' notice	9½-9¾	8⅝-8¾	10⅞-11 1/16	5½-5⅝	1¾-2	5½-5⅝	10⅞-11	13¾-14¾	10¾-11¼	10⅝-10⅞	6⅜-6½	11⅛-12
Month	9 1/16-9 3/16	8 11/16-8 13/16	10 7/16-10¾	5 9/16-5 11/16	5 1/16-5 3/16	5⅝-5¾	10⅝-10⅞	14-14½	10¾-11¼	10½-10¾	6 5/16-6⅝	11⅛-12
Three months	9 1/16-9 3/16	9 1/16-9 3/16	10 7/16-10¾	5¾-5⅞	4⅞-5	5 5/16-5 7/16	10 13/16-10 15/16	14¼-14¾	10½-11	10½-10¾	6⅜-6 9/16	11⅛-12
Six months	9 5/16-9 7/16	9½-9⅝	10 7/16-10¾	5⅞-6	4⅞-5	5⅝-5¾	11 1/16-11 3/16	14⅝-15	10⅞-11⅛	10½-10¾	6⅜-6 9/16	11 7/16-11 11/16
One year	10-10⅛	10⅛-10¼	10 9/16-10⅞	5 11/16-6 1/16	4⅞-5	5⅝-5¾	11¾-12⅛	14½-16	10¾-11¼	10½-10¾	6⅜-6 9/16	11 9/16-11 13/16

Asian $ (closing rates in Singapore): Short-term 8⅝-8¾ per cent; seven days 8¾-8⅞ per cent; one month 8 13/16-8 15/16 per cent; three months 9-9⅛ per cent; six months 9 7/16-9 9/16 per cent; one year 10 3/16-10 5/16 per cent. Long-term Eurodollars: two years 11¼-11⅜ per cent; three years 11½-11⅝ per cent; four years 11⅝-11¾ per cent; five years 11⅞-12⅛ per cent nominal rates. Short-term rates are call for U.S. dollars and Japanese yen; others two days' notice.

MONEY MARKETS

Money flows disturbed, otherwise quiet

A quiet week on the London money market drew to a close with interest rates virtually unchanged from the previous Friday. Hopes of another cut in clearing bank base rates remain alive, but at the moment the market is going through a period of consolidation and is keeping one eye on sterling.

The pound equalled the record low of 74.0, first touched on October 19, at 3 pm the Monday, reflecting concern at falling North Sea oil prices on the spot market.

Sheikh Yamani, Saudi Arabian oil minister, commented during the week that oil prices are likely to rise in December as demand picks up. Opec ministers are due to meet this month, and there had been suggestions this could result in oil price cuts, but by Friday prices were slightly firmer, and the market seemed to be taking Sheikh Yamani's warnings to heart.

UK clearing banks' base lending rate 9⅝-9¾ per cent since November 23.

Sterling's index finished the week unchanged at 74.9, although if the Bank of England had waited a little longer before making the final calculation it would probably have been lower because of a late surge by the dollar, pushing the pound back below the $1.20 level.

Apart from some concern about sterling the market is not expecting any sudden reversal in interest rate trends, since the marked slowdown in U.S. economic growth should ensure that rates continue to decline. The only proviso is with regard to the U.S. budget deficit, which dealers fear may limit any fall in rates. There was little reaction to the Reagan Administration's proposals to eventually halve the deficit, since in the present financial year it is almost certain to be more than $200bn.

The British Telecom share issue took most of the London market's attention last week. The problems with regard to day-to-day money flows as a result of funds earmarked for the flotation were not excessive, but are expected to grow much worse this week. The Bank of England tended to be generous with its daily help, and as from tomorrow when money will disappear permanently into British Telecom shares the authorities are also making available £1.5bn in temporary facilities to smooth the market through a period when money flows will be disturbed.

MONEY RATES

Nov 30	Frankfurt	Paris	Zurich	Amst'dam	Tokyo	Milan	Brussels	Dublin
Overnight	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
One month	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Two months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Three months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Six months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lombard	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Intervention	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

LONDON MONEY RATES

Discount Houses Deposit and Bill Rates

Nov. 30 1984	Sterling Certificate of deposit	Interbank	Local Authority Deposits	Company Deposits	Market Deposits	Treasury (Buy)	Treasury (Sell)	Eligible Bank (Buy)	Eligible Bank (Sell)	Fine Trade (Buy)
Overnight	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2 days notice	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 days or	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7 days notice	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
One month	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Two months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Three months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Six months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Nine months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
One year	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

	Local Auth. negotiable bonds	Local Authority Deposits	Finance House Deposits	$ Cert of Deposits	SDR Linked Deposits	ECU Linked Deposits
One month	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Two months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Three months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Six months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Nine months	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
One year	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Two years	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Three years	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Four years	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Five years	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

ECGD Fixed Rate Export Finance IV: Average Rate of Interest period October 3 to November 6 1984 [illegible]

FT LONDON INTERBANK FIXING

(11.00 a.m. November 30)

3 months U.S. dollars	
bid 9 1/16	offer 9 3/16

6 months U.S. dollars	
bid 9 1/2	offer 9 5/8

The fixing rates are the arithmetic means, rounded to the nearest one-sixteenth of the bid and offered rates for $10m quoted by the market to five reference banks at 11 am each working day. The banks are National Westminster Bank, Bank of Tokyo, Deutsche Bank, Banque Nationale de Paris and Morgan Guaranty Trust.

MONEY RATES

NEW YORK (4 pm)

Prime rate; Broker loan rate; Fed funds; Fed funds at intervention — [illegible]

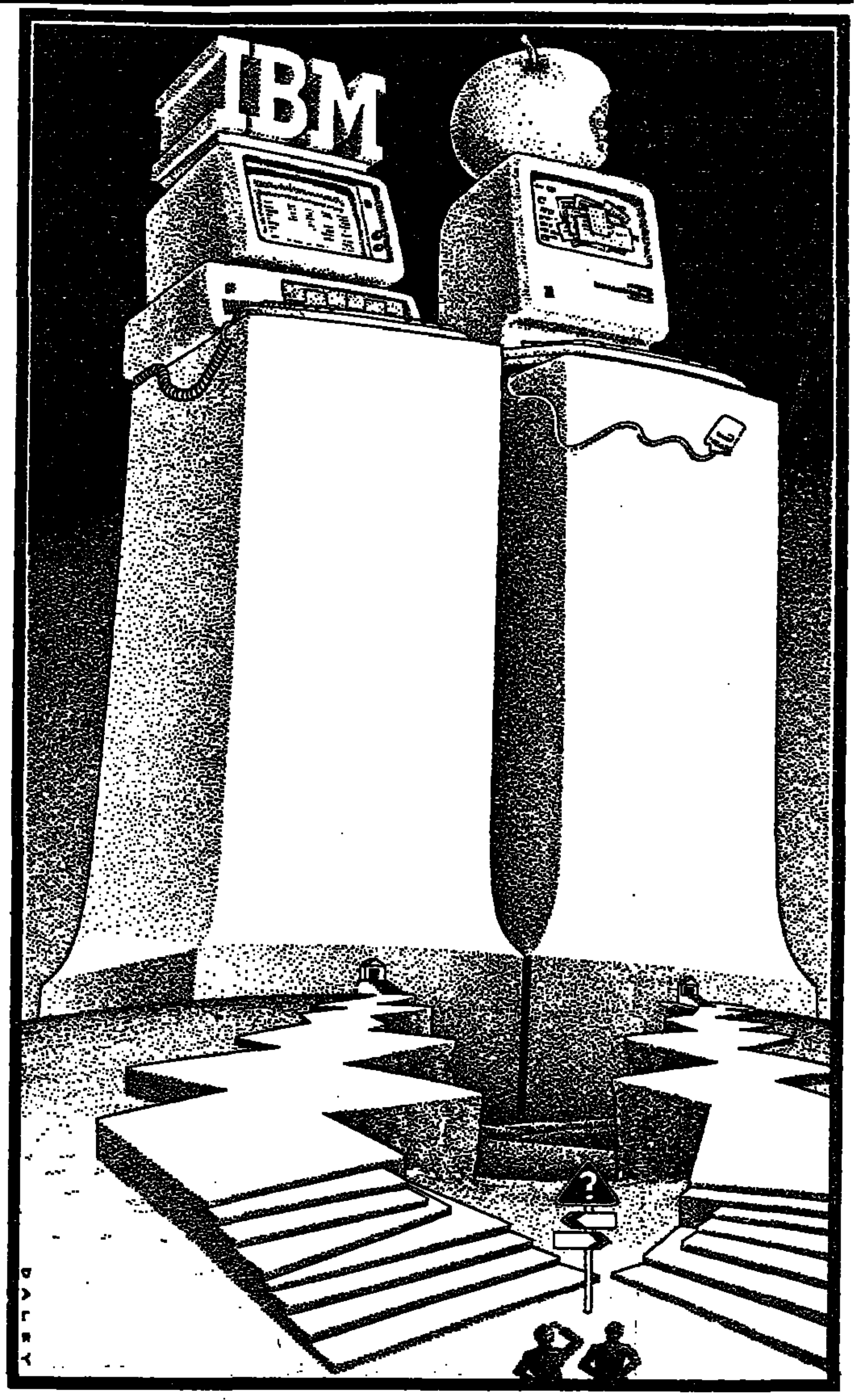
Treasury Bills: One month; Two month; Three month; Six month; One year — [illegible]

Treasury Bonds: Two year; Three year; Four year; Five year; Seven year; 10 year; 30 year — [illegible]

هكذا من الأصل

FINANCIAL TIMES SURVEY

The software industry is growing at an unprecedented rate, but fragmenting as it does so into distinct, sometimes opposing, camps. It means that difficult decisions are ahead for software manufacturers, suppliers and users.



Computer Software

Approaching the great divide

BY ALAN CANE

THE SOFTWARE business world-wide has been through one major revolution in the past five years; now it seems set for further upheavals as the full implications of personal computing sink in.

The first revolution created two software industries in the West; the traditional mainframe and minicomputer orientated business with its emphasis on established data processing departments in business, government or defence, and the new microcomputer orientated business centred around personal computing, whether for business or leisure.

The traditional software business, concentrating principally on the creation of software tailored to its customers' precise requirements and on the sale of "packages" of generalised software, was a comfortable growth business in which the better companies prospered even if it failed to tempt the entrepreneurs and the City. Management Science America (MSA), for example, became the largest independent computer software company in the world with more than 12,000 systems in use through its dedication to the sale of business packages for accounting, purchasing and so on.

The microcomputer software business was completely different. It was fast-moving, unpredictable, and it offered fast profits to investors. Only a year ago, it seemed that an investment in any software company was bound to succeed.

Companies such as Visicorp, Microsoft, Digital Research, and Lotus were topping the business software rankings and demonstrating dramatic growth. Software authors were making their fortunes overnight.

But now the pattern has changed dramatically. Most of the major stars of the microcomputer software business are still there but, like Visicorp, shining less brightly.

Others like Lotus and Digital Research are still shining, but with a different colour. And the full effect of the entrance of IBM to the microsoftware market, even if the redoubtable Ben Rosen dismisses its software as "lousy personal computer software that is not going to sell well" has yet to be seen.

A distinct dichotomy is emerging: consider, for example, the fates of Lotus and Digital Research.

Integrated systems

Lotus is still top of the software pops with its integrated software package "1-2-3." Its yet more integrated successor "Symphony" is number two in the Business Bestsellers' chart compiled by the authoritative U.S. newspaper *Software News*, but even Mitchell Kapor, Lotus chairman and inventor of the integrated microsoftware package, agrees that it will not have such wide appeal.

Integrated packages were one approach to making microcomputing easier for ordinary businessmen. It gave them the ability to use a spreadsheet, database and graphics without switching disks several times.

Symphony added word processing and communications, but in doing so made the whole package much harder for the non-computer specialist to handle.

Speaking at a Financial Times conference last month, Mr Kapor said: "The appeal of Symphony is centred among the more quantitatively oriented, the more sophisticated or power users; to the extent that we at Lotus encouraged the world at large to believe that Symphony integrated software would become a panacea or universal solution, I think that is not the case."

Lotus has, in fact, just announced a new integrated package, Jazz, that runs on Apple's Macintosh computer with its screen icons, windows and mouse. Mr Kapor argued: "For the first time, we are going to have a product for the less sophisticated user, as opposed to the power-user or spreadsheet number cruncher."

CONTINUED ON PAGE 3

IN THIS SURVEY

The survival of the fittest

"SURVIVE IN '85" is the latest slogan for U.S. personal computer software developers. In the midst of an industry shakeout that makes the cut-throat competition of the personal computer hardware business look like a good natured bun fight, software companies are trying to figure out how to stay alive in an increasingly hostile environment.

Estimates put the number of U.S. personal computer software companies at the beginning of this year at around 6,000. By January 1985 less than half of these companies will remain in business, according to industry experts.

Developments in the U.S.

LOUISE KEHOE in California

U.S. sales of personal computer software will continue to grow steadily, according to Future Computing, the Richardson, Texas market research firm. The analysts expect world sales this year to total $3.7bn, rising to over $11bn by 1987. In the meantime, however, the software industry is expected to go through a major transformation.

The reshaping of the personal computer software industry is well underway, but it could last another year suggests Mr Eric Kadison, vice president of product planning and development for Media Systems Technology, an Irvine, California-based supplier of software duplication systems and services. The industry is moving from being "totally disorganised" into a structured business hierarchy, he believes.

"The software industry is basically still quite new and thus, is made up mainly of small, entrepreneurial firms and individuals who are either writing software programs for computer manufacturers or are developing, marketing and distributing programs themselves," says Mr Kadison.

The transition from cottage industry to a major international business is inevitable and may indeed benefit the consumer, Kadison suggests. Smaller software firms are having significant financial problems, while multinational companies, such as IBM and AT&T have made major commitments to personal computer software publishing.

"The days of the rags-to-riches stories in the software industry are quickly fading," warns Mr Kadison. It is becoming increasingly difficult for small companies to develop and market their own software because of the huge financial and manpower resources needed, he explains.

The opposite was true just 12 months ago. Then, anybody with programming talent and a personal computer could bring a software product to market. Marketing costs were minimal. Today the picture is very different. Just packaging a computer program professionally can cost upward of $20,000. Advertising budgets totalling over $1m are not unusual. For a new software company, the biggest problem is, however, reaching the customer. Without the assistance of a large software publishing house or one of the major distributors it is virtually impossible for a small company to get its product on to the over-crowded shelves of computer stores.

Softsel, one of the largest U.S. software distributors, says that it receives as many as 4,000 new programs per month for evaluation. Of those it chooses no more than 40 to distribute to its retail store customers.

U.S. software and services industry

Type of company	Number of companies	Noncaptive U.S. revenue 1983 ($bn)	Employees ('000)	Public companies after tax profit margins† (%)
Processing services	2,150	14.6	215	5.3
Software products	2,250	7.5	94	7.8
Professional services	1,400	6.4	98	3.6
Turnkey	1,200	4.1	52	7.5
Total	7,000	32.6	459	5.6

† Profit margins after tax are presented in this report rather than the pretax margins presented in previous reports.

Source: Input, California.

Hot list

Softsel's "hot list," a weekly listing of top selling programs in the recreation, business and education categories gives a good picture of what is happening in the market. In recent listings, the vast majority of products listed in the top 30 business programs have been on the list for several months. The top three programs—Lotus 1-2-3, PFS-file and Multiplan have been close to the top of the list for nearly two years.

Even the "new" programs on the list are mostly from established companies. Lotus's Symphony, introduced in February, is number four. Ashton-Tate's DBase III is number nine. But there is still hope for the entrepreneur. Rising up the software "charts" is a program called "sidekick," the first personal computer business software hit for Boreland International of Scotts Valley, California.

The entry of IBM into the personal computer applications program market last September with a range of 31 business related programs has brought a new dimension to the industry. "It will have a tremendous impact upon every aspect of the business," predicts Ms Jan Lewis, senior analyst at Infocorp, a Cupertino, California, market research firm.

While initial reviews of IBM's business software have been mixed, few in the industry doubt that the programs represent just the first step toward IBM becoming a major factor in the software market.

"In general, competition is getting stiffer, the market is less forgiving. IBM's entry is going to make it more so," comments Mr Mitchel Kapor, president of Lotus Development, the leading U.S. personal computer software company.

Anxieties

Underlying much of the industry's concern about IBM's software introductions are fears that IBM may at some point change the "open system" architecture of its personal computers which allows software developers access to the PC operating system replacing (or enhancing) it with a proprietary operating system. This could reduce the oportunities for third party software companies in the key MS-DOS compatible software sector which is estimated to be worth $1.3bn this year.

The home computer software business is even more risky than the business sector. Recent "fire sales" in the U.S. have seen even well-known titles discounted to a fraction of their original prices. Some major publishers have shipped large quantities of products to overseas markets—particularly Australia—in a desperate effort to unload programs.

As the Christmas sales season approaches, the home computer software market is taking on many of the characteristics of the market for video game cartridges two years ago. Retailers are overstocked with old titles and reluctant to buy new ones until they clear their shelves.

Publishers of games and entertainment software hope that a strong Christmas sales boom will refill their empty coffers.

There is increasing concern, however, that Christmas '84 will not live up to the industry expectations. Spinnaker Software, publisher of some of the most popular home computer programs, says that its sales of software for the top-selling Commodore 64 slumped by 40 per cent in September.

Mr John Imlay (left), chairman of MSA, the world's largest independent software company; and (right), the man who invented the CP/M operating system, Mr Gary Kildall, chairman and founder of Digital Research

A battle to attract investors

"THE TROUBLE is the City does not understand something it cannot kick," complained the chief executive of one high flying British software company after a frustrating search for finance.

For years, software companies have been complaining about the problems of finance. Yet the very few software companies to have full quotes on the London Stock Exchange—such as Logica Microfocus and Systems Designers—also have some of the highest ratings in the electricals sector.

Software finance

JASON CRISP

In the U.S., the fierce growth and subsequent shakeout in the personal computer industry has left many investors poorer and more wary of the dangers of the industry. For every Digital Research, Microsoft and Lotus there are hundreds of software companies that failed to make their mark and many have gone out of business.

As Mrs Jacqueline Morby, *general partner* in TA Associates commented at a recent FT conference: "I feel a fundamental change has taken place for investors in high technology. From 1978 to 1982 a boom market was in existence caused by the use of the microprocessor in many different products plus the growth in the personal computer industry.

"For venture capital, unheard-of growth rates took place. It seemed one could invest in any company and succeed. When there are rapidly growing markets, companies can succeed in spite of mistakes, products and mediocre management. No matter what you invested in, you could make money."

But recently there has been a spate of bad news from the U.S. as Mrs Morby noted: "There were companies closing their doors without ever shipping products. There were announcements of executives leaving major companies that were notably having problems. There were announcements of cutbacks in work-forces.

"Many of these companies were well known and have had much publicity. Moreover, the dollars invested in these companies were extremely high. Some examples of these are Gavilan, Ovation, HES, Knowware, Syte and others. We in the investment community know of a number of others in trouble that have not been announced."

Despite the set-backs there are still large sums of money available in the U.S. for all types of high technology companies ranging from new software ventures to biotechnology.

Mr Ben Rosen, chairman of Sevin Rosen, the venture capitalists, and also chairman of Compaq, the highly successful personal computer company, says: "After raising money in the United States in the order of $30-$40m a year in the 1970s, the new money raised last year was $4.5bn. The amount invested in new companies was about $3bn, so there still is a huge unspent amount of money, in addition to the new money in the billions being raised every year."

In Britain there appears to be far more funds available for high technology centres than there were in the 1970s. In those days many of Birtain's best-known software companies turned at one time to the National Enterprise Board for funds. (The state-owned NEB now merged with the National Research and Development Corporation as part of the British Technology Group.)

Software companies which have, at some stage, had NEB finance include Logica, CAP, Aregon, Quest and Fercom.

Logica, one of the largest independent software companies, went public just over a year ago. The company floated about 30 per cent of its equity in a tender offer with a minimum price of 140p. At the time Mr Philip Hughes chairman of Logica said: "We have deliberately pitched this at what we consider a very modest price. Let the market decide what we are really worth."

It did. The offer was more than seven times oversubscribed and the price was struck at 220p and recently the company has been trading at over 400p. The financing enabled some of the institutional shareholders to realise their investments, created a market for the employee's shareholdings, paid off an overdraft and increased working capital to meet growth needs.

Full listing

The smaller Micro Focus achieved a full listing on the London stock exchange after a flotation on the unlisted securities market in May last year. Microfocus, which sells software packages to some of the leading microcomputer groups, found that the extra finance enabled it to speed up developments which had been held back because of previous underfunding. With the finance, it was able to move to new offices and computerise many of its own operations.

The USM has become an important source of finance for a growing number of small UK software companies. Software companies which have joined the USM include Telecomputing, Rolfe and Nolan, Compsoft, Brikat and Consultants (Computer and Financial).

A recent review of computer companies on the Unlisted Securities Market by stockbrokers Fielding, Newson-Smith noted that the software services companies were quite cheap compared to their equivalents with a full listing. The position was reversed in the case of software product companies which had a better rating on the USM.

The brokers commented: "The reasons for this apparent inconsistency we believe are to do with the perceived quality of earnings growth. Fully listed software services companies demand an enormous premium due to anticipated demand for such broadly-offered services, but USM service firms are often perceived to have a dangerously narrow client base.

"Among the software product firms, the fully listed Microfocus has a relatively modest rating for its explosive profits growth owing to the inevitability of product vulnerability. The USM firms enjoy similar ratings because, despite being smaller, they display a similar product profile and growth potential."

Computerised examination system

THE CITY and Guilds of London Institute, Britain's largest technical testing and qualifying body, has computerised its examination administration processes with a system called Circe II (Computerised Issue of Results and Certificates from Entrities), jointly developed by City & Guilds and Software Sciences, City Division.

Circe II handles over half a million examination entries a year, plus related administration and fee work. Its implementation is intended to bring big savings in running costs, improvements in efficiency, notably in information processing and management, as well as offering greater flexibility in preparing and holding examinations.

Circe is a database orientated system, and the configuration, selected by Software Sciences, runs on a DEC VAX 11/780 with DBMS and FMS/2 forms-screen handling and handles interactive and batch processing.

* * *

RANK XEROX (UK) is to grant more than £600,000 worth of hardware, software and services to Cambridge University Computer Laboratory.

The grant is one of 13 being made as part of a £10m international programme, but Cambridge is the only recipient university outside the United States.

The grants provide each school with the Xerox Development Environment, an advanced software and hardware development system, used extensively at Xerox between leading university computer science departments and Xerox research centres.

Computer scientists and others will use this equipment mainly for research and teaching in the areas of distributed computing applications, programming languages, network architectures, and software development tools and environments. Other groups will use the equipment for research in medicine, management, artificial intelligence and office automation.

* * *

SANDERSON Computers of Sheffield has won orders valued at £500,000 for its own British-designed and made PICS integrated on-line financial and production control software system.

Customers for PICS, which is a PICK-based range of software packages, include Yorkshire Brick; Abbey Panels in the aerospace industry; Anson Plastics; Rittall in the enclosures industry; Street Crane; Sherborne Pouffes and a number of other concerns in sectors including automotive products, goods distribution and local authorities.

"We are particularly pleased that our British product has been so well received in such a wide variety of markets," says Mr Paul Thompson, a Sanderson director. "The orders have included related Zebra micros from GA, and another product designed and made by Sanderson—the 'Script' hand-held on-line two-way radio data terminal which also looks to become a major product for us in its own right."

Sanderson Computers is a member of the Bramah Engineering Group.

THE Rank Organisation's Royal Lancaster Hotel in London has installed a multi-terminal "Champs" hotel management system to handle its reservations, front office and accounting.

The order for the 435-room hotel, which has one of the largest banqueting facilities in the capital, was placed following the successful installation of Champs (computerised hotel accounting management processing system) another Rank hotel, The White House in Regents Park.

The system, worth nearly £200,000, runs on a dual Data General S280 minicomputer and supports 26 terminals. It provides full back and front office facilities.

High optimism in packages sector

Developments in Britain

ALAN CANE

THE BRITISH computer industry has always taken pride in the quality of its software. It is a justifiable pride because UK programmers, for the most part, are highly professional in their work methods and produce very good software indeed.

Yet many would argue that it is a misplaced pride, and has contributed to the sense of complacency which dogged the British computer business for so long.

The fact is that many other nations are just as good at writing software as the British, and at lower cost. "Off-shore programming" in India, for example, is one approach which has borne fruit for some companies. And while some write-off the Japanese for their lack of programming skills, others see their "fifth generation" computer programme as a vehicle for making up lost time fast.

Furthermore, the UK has proved particularly poor at marketing and exporting software. Among the few UK-written products which have achieved world-wide acceptance are Shadow II, a data communications package first developed by the Thomas Cook organisation; Wizard/System W, a financial planning system written by the UK arm of the U.S. Comshare organisation; CIS Cobol, a microcomputer version of the commonest business computer language, developed by Micro-focus; and the banking packages, Midas from BIS and Arbat from Arbat.

New pattern

Traditionally, the UK software industry has been made up of a large number of small to medium-sized companies earning a comfortable living by retailing software packages, often of U.S. origin, and installing software specially written (bespoke) to the customer's requirements.

Now that is changing as large and powerful companies start to emerge through growth and by acquisition from the pack.

The most recent survey carried out by the Computing Services Association (CSA), the trade association representing many of the top UK software and services companies, concluded: "The steady maturing of the computing services industry is evidenced by the continued growth in the size of the larger companies and the subsequent domination by them of both revenue (75 per cent) and staff employed (77 per cent).

"There are now five CSA member companies, employing over 1,000 staff, as against two in mid-1983."

Over the same period a whole array of new companies were formed to exploit the market for microcomputer software, especially computer games. Names such as Alligata, Micromega, Quicksilva, and Scorpio are becoming well known in a way that few of the traditional software houses could have equalled.

There are clear signs, however, that this sector of the software market is over-heating and that substantial rationalisation will reduce the number of companies participating in the near future.

Furthermore, it remains to be seen whether the best of these new companies—such as Psion, which started out writing superior games for the Sinclair Spectrum and graduated to developing integrated business packages for the Sinclair QL—can take on the spectacular U.S. start-ups like Lotus or Boland International at their own game.

For the medium-sized and larger companies — traditional software houses such as Scicon, CAP and Logica—the prospects for sustained high growth seem good. Indeed, just as in the early and middle 1970s, the chief obstacle to growth seems to be the availability of suitable staff.

Nevertheless, total billings for all CSA companies were more than £1bn between mid-1983 and mid-1984 with a growth rate well over 20 per cent.

The CSA comments: "With optimism running high, this impressive rate of growth will continue well into 1985, and shows every sign of gaining momentum to reach even higher levels in 1986."

The chief area of growth for these companies was the software products sector—the production and sale of software "packages," pieces of software which have applicability across a wide spectrum of similar users.

Packages have assumed a growing popularity world-wide in recent years as the cost of having software specially written and installed has risen sharply.

According to the market consultancy, IDC, in the UK the share of the market held by bespoke software in 1981 was 29 per cent against 28 per cent for packages.

By 1984, the share held by bespoke software was only 27 per cent against 38 per cent for packages. By 1989, IDC expects the bespoke share of the market to have shrunk to 20 per cent, with packaged software claiming a 57 per cent share.

The principal independent packaged software vendors in 1983 were, according to IDC, MSA/Peachtree, the largest independent U.S. software and services company, Peterborough Software, Packaged Programs and BIS.

The UK market for applications software for business microcomputers is the largest in Western Europe at a little less than 120,000 units in 1983, and worth, according to the U.S.-based marketing consultancy Creative Strategies, about $30m at retail prices.

It includes more than 44,000 units of accounting packages (almost by definition, microcomputer software comes as packages rather than bespoke programs), 33,000 word processing packages, 20,000 database management systems and 13,000 spreadsheets.

The prospects for accounting packages look especially bright. Creative Strategies notes that by 1988, the total UK business applications software market "will be expected to absorb almost 1m units, more than 400,000 of them as accounting packages.

New and sometimes unexpected retailers and distributors of both games and business programs have emerged as software has taken on the aspect of a commodity item rather than a specialist product. Earlier this month, for example, Marks and Spencer, Britain's biggest retailer, announced that it would be selling a range of computer software starting with a couple of games and a program enabling the user to create his or her own games.

More activity

W. H. Smith, in addition to its home computer activities, is establishing business computer centres. The Information Technology division of Thorn EMI, the electronics group, emerged as one of the largest software products businesses in Europe after adding EPS Consultants to its list of software subsidiaries, including Datasolve and Software Sciences.

What are the reasons for all this new activity? According to CSA member companies, there is a clear message that 1983-84 is being seen as a period when business expansion began to pick up strongly, not just within the computing services business, but across the economy as a whole.

Significantly it said: "Across the smaller companies, it is notable that the strength of the trend towards microcomputer solutions was seen as very important.

"It is also among the smaller companies that the positive impact of Government-sponsored schemes is recognised."

So when the CSA has also picked up evidence of renewed vigour in UK software exports, it is understandable that there is considerable annoyance that the Government's Software Products Scheme has been one of the victims of a five-month moratorium on information technology spending, announced earlier this month by Mr Nigel Lawson, Chancellor of the Exchequer.

Since 1982 it has awarded over £10m a year to a variety of software projects.

According to Dr Douglas Eyeions, director-general of the CSA, it has led to the development of software with a capital value in excess of £100m.

UK packaged software

Major hardware manufacturers—packaged software; revenues in 1983:

Company	Country of origin	Revenue $m	Market share %
IBM	U.S.	96.9	26.8
ICL	UK	59.1	16.4
DEC	U.S.	33.0	9.1
H-P	U.S.	17.7	4.9
HIS	U.S.	16.7	4.6
Burroughs	U.S.	15.0	4.2
Sperry	U.S.	7.8	2.2
Prime	U.S.	7.5	2.1
NCR	U.S.	5.9	1.6
Olivetti	Italy	5.6	1.6
Other		95.8	26.5
Total		361.0	100.0

Source: IDC.

UK software vendors

Major independent packaged software suppliers in 1983:

Company	Country of origin	Revenue $m	Market share %
MSA/Peachtree	U.S.	10.0	5.2
Peterborough Software	UK	8.1	4.2
PPL	UK	6.4	3.4
BIS	UK	5.9	3.1
ACT	UK	5.6	2.9
DRI	U.S.	4.5	2.4
Thorn EMI	UK	4.5	2.4
VisiCorp	U.S.	4.3	2.3
MicroSoft	U.S.	4.2	2.2
Cincom	U.S.	4.1	2.1
Other		133.4	69.8
Total		191.0	100.0

Source: IDC.

UK third party vendors

The top 15 third party vendors in 1983:

Company	Country of origin	Revenue $m	Market share %
Thorn EMI	UK	56.3	3.9
Geisco	U.S.	43.5	3.1
Hoskyns	UK/U.S.	36.9	2.6
IBM	U.S.	36.8	2.6
Centre-File	UK	35.8	2.5
Scicon Int.	UK	34.3	2.4
Logica	UK	31.7	2.2
CAP Group	UK	26.2	1.8
Baric	UK	20.5	1.4
Comshare	U.S.	19.2	1.3
ADP	U.S.	18.7	1.3
CMG	UK	16.7	1.2
Data Logic	UK/U.S.	15.7	1.1
SDL	UK	14.0	1.0
BIS	UK	12.9	0.9

Source: IDC.

Industry all set for further upheavals

CONTINUED FROM PAGE 1

Next consider Digital Research, a company which made its name and fortune by developing the operating system CP/M for 8-bit microcomputers —and so making business data processing on personal computers possible at all. (An operating system is software which controls the working of the computer itself; an applications program carries out a specific task for the user.)

Its rival, Microsoft, was chosen by IBM to develop an operating system for the 16-bit IBM Personal Computer. It retaliated first by developing an operating system, Concurrent DOS, which allows the IBM operating system to run within its envelope as if it were an applications program.

Now it has launched a new operating system that makes virtually any personal computer behave as if it was a Macintosh, screen icons, screen windows, pull down menus, mice and all. What is more it is so designed that it can run any program designed for the IBM PC.

All of which tends to underline the view that there will soon be only two ways to carry out personal computing in the future, the IBM way (formal, professional, ordered) and the Apple Macintosh way (visual, simple, for the casual user).

Software houses will clearly have to cover their bets each way to stay in business; there was never any doubt that the IBM PC approach was here to stay. But despite the innovative nature of Apple's approach, the fact that Lotus, Digital Research and Microsoft all support the Macintosh (Bill Gates, chairman of Microsoft, played a significant role in the development of the machine) suggest it is more than simply the latest fad.

What is certain is that following the latest fad is no path to success. Visicorp, Lotus and other pioneers spawned a host of imitators which managed to secure venture capital only to find the market window had closed.

According to Ms Jacqueline Morby of TA Associates, an important venture capital organisation, "these lookalike companies are often trying to address a very narrow window of opportunity where if there are any design or technical delays, any mistakes in marketing, any hitches in funding, it will be too late to succeed.

'Lookalike companies are often trying to address a very narrow window of opportunity . . . in an overcrowded market'

"Many of them get their products ready just in time to enter an overcrowded market."

Which explains why the future has suddenly turned so black for many of these entrepreneurial companies. But it is not only the entrepreneurs that are in trouble. At the same time as Microsoft was going through the $100m revenues barrier to set a new target for the competition to aim at, the mighty MSA was setting in motion new plans to divest itself of Peachtree, its microcomputer subsidiary.

It bought Peachtree as a short cut to the technology needed to establish communications between personal computers and mainframes, the so-called "micro-mainframe link." The problems built up when it moved into the personal computer software market.

It discovered that the management styles needed to control a major company selling sophisticated mainframe packages at up to $100,000 a time and a small microsoftware company selling a high volume of packages at a few hundred dollars a time were very different.

Eventually it decided simply to go back to doing what it knew best. It has circulated a prospectus and some 25 prospective buyers are said to be interested in acquiring Peachtree.

These trends can clearly be discerned in the U.S. and Europe; but what of Japan?

According to the International Data Corporation, Japanese software is at least three years behind that of the West; their operating systems lack the sophistication of the best U.S. systems and their standard applications software is unsophisticated and lacking in volume.

But the Japanese Government has established a software technology centre, the hardware industry has funded a Japan Systems Development Organisation and the Association for the Promotion of the Software Industry has formed a distribution centre. It has been easy in the past to dismiss Japanese software efforts, but not for much longer.

The Japanese already show skill at developing and programming computer games—and business software is only one kind of computer game.

Excelling in games and graphics

INSTEAD of working in the quiet of an up-market office environment or out of a home garage, most Japanese computer programmers rub shoulders with thousands of others in a software factory owned by one of the major computer manufacturers.

There are also an estimated 2,000 independent software companies in Japan, mostly surviving on sub-contracted work to the major computer manufacturers.

The Japanese Ministry of International Trade and Industry (Miti) estimated software sales in the country to have been U.S.$1.4bn in 1982. But it is not easy to put an exact figure on the size of the Japanese software market because computer makers, who also supply the majority of software, are reluctant to divulge the proportion of revenue derived from this source.

One of the reasons for their reluctance is that nearly their entire business is selling total computer systems, which are custom-made and therefore vary from one another in costs, making calculations difficult. Straight-forward software sales are small for the leading computer firms—Y37.7bn or 7 per cent of total computer sales for NEC Corporation and 10 per cent for Hitachi.

Custom-designed programs are still the norm in Japan, though there are those who hold the view that custom-made software, while it may be profitable, consumes too much time and manpower.

Benefits

Standardisation lowers production costs and increases the number of programs that can be used on a range of machines that share certain basic specifications. Making the machines compatible to a wide range of programs would help to raise the appeal of the machines.

But Mr Masao Matsumoto, manager of NEC's software engineering department, disagrees: "In theory," he says, "this is correct. But at NEC, we have found that it is not so profitable to mass produce stereotyped software."

NEC has developed tools to automate programming, using what it calls Systems Engineer's Arms (SEA/I) application software productivity system and Software Design and Management Systems (SDMS), according to Dr Kiichi Fujino, general manager of NEC's software product engineering laboratory.

Sony, Canon, Matsushita,

Progress in Japan

TERESA MA in Tokyo

Toshiba are among 12 Japanese electronics companies making low-cost computers using the MSX standard developed by Microsoft of Bellevue, Washington and ASCII Corp., a Japanese software house and Microsoft's licensee in the Far East (Microsoft charges a licensing fee for the use of the basic computer language and a royalty fee for each machine produced with the standard.)

"In the 8-bit world, MSX has set a standard. The U.S. may realise a standard for 16-bit by June 1983 and we can have the kanji version of that ready two or three months later," said Mr Sam Furukawa, ASCII's general manager of research and development.

For the future, the Japanese Government would like to see UNIX become a standard for 16/32 bit processors, but some computer programmers consider the UNIX, which was designed by the Bell Laboratories to do scientific and technical tasks, too high-brow.

The Japanese have excelled at computer graphics, having cracked the difficulties of computerising the intricate kanji (Chinese ideograms) of the Japanese language. There is little competition in this field from foreign computer companies.

In addition, Japanese software manufacturers are in a good position to take over the largely untapped but potentially lucrative market in China.

Japan's immensely popular, slick video games are an offshoot of computer graphics design. Another software product that can cross the language barrier and perhaps find receptive export markets is technical programming for science and engineering. These programs are required to handle standardised technical procedures using drawings and numbers, rather than words.

An exception to Japan's ambition to export seems to be application software for use in office and personal computers. Work instruction manuals and programs have to be translated from Japanese and sometimes programs have to be rewritten to suit different working needs.

The different business environment in each country makes it impractical to simply translate programs into English or other languages.

ASCII managers see much potential in the Japanese software industry for improving software imported from the U.S.

"The kind of domination Japan had in semi-conductors, audio-visual equipment, or automobiles would not happen in the field of Japanese software," said President Akio Gunji.

"But our enhancement work has been progressing more quickly than research and development in the U.S. We could sell it back." ASCII itself has developed the Japanese-language version of UNIX, called Kanji UNIX.

The company which began its business in publishing computer magazines in 1977, chalked up sales of Y5.886bn in fiscal 1983 (ended March 1984), some 55 per cent of which was in software. Its projected sales for fiscal 1984 is Y8.5bn.

Over 30 per cent of its software sales is programs for business personal computers but the big money is still in amusement games. It engages 40-50 people full-time in the software division and in addition, subcontracts four smaller software firms to write computer programs.

Japan's top computer makers—Fujitsu, Hitachi and NEC—want to create sophisticated software and are ready to spend more than Y120bn on software research and development in 1984 alone.

In one year, between 1983 and 1984, NEC established five software subsidiaries in Japan, bringing the total number to nine. NEC also has a subsidiary specialising in software for automated fingerprint identification systems.

NEC Corporation ploughs back 11 per cent of revenue into research and development, according to a company spokesman who, however, declined to reveal the actual amount which goes into software.

Fujitsu, Japan's number one computer maker, with computer revenues of $3bn last year, spends about a third of its nearly $300m research and development budget on software. Hitachi is spending some 30 per cent of its research and development expenditure on software.

Much of the big computer makers' research and development efforts go into program development aids and are aimed at equipping the future fully-automated factory.

As a result, Japanese software is highly reliable. NEC pays dues to the company's quality-control circles for detecting and reducing the number of bugs and correcting defects in a program during design stage.

The Japanese Government, on its part, is helping to nurture the software industry by setting up several research and development laboratories and giving tax breaks and low-interest loans to software developers.

Legislation

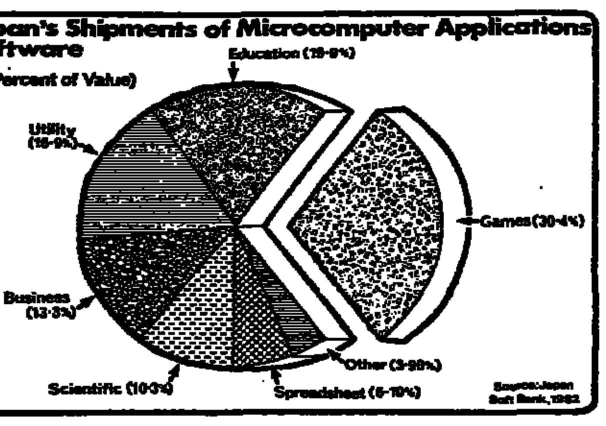
Other things are required to assist the growth of the Japanese software industry. Legislation, for example. There is no law to protect computer software from unauthorised reproduction.

Miti wants to promulgate a new copyright law providing 15-year programme rights, to which U.S. lobbies have voiced protests, saying that the period allowed is far too short to be effective.

The issue has been particularly sensitive since the 1982 copyright dispute between International Business Machines (IBM) and Hitachi. IBM charged Hitachi with copying IBM software for sale together with Hitachi machines.

The dispute was finally settled out of court after Hitachi agreed to pay software licence fees and allow IBM to inspect its products before they were marketed. However the Japanese computer manufacturers are also confronting copyright problems on the home front and numerous disputes are brought to court each year.

Japan's Shipments of Microcomputer Applications Software



More than 38,000 programmers are involved in Japan's software industry. The number of programmers working for leading software suppliers are Nippon Denki Software (1,065); Nihon Business Consultant (1,350); Computer Service Kaisha (3,100), and Hitachi Software Engineering (1,450).

Research in Japan

Government R&D Grants for Software Development

Area	Budget (FY 83) Ym	$m
Fourth generation software	2,360	9.8
Software maintenance	840	3.5
Advanced General Purpose	940	3.9
Business processing	637	2.7
	4,777	19.9

Source: IDC Japan

Western Europe market summary

Business Application Software, Unit Shipments and Revenue by Product Type 1983-88 (Units and Revenues in Thousands)

	1983	1984	1985	1986	1987	1988	% CAGR†
Word-processing units	90.64	152.17	232.31	343.25	501.00	735.80	52
Word-processing revenue ($)	16,298	24,714	34,035	45,392	59,796	78,179	37
Database management units	56.83	134.23	223.53	340.56	500.21	724.85	66
Database management revenue ($)	20,620	44,929	67,527	92,466	122,023	158,933	50
Spreadsheet units	34.39	98.21	169.81	258.18	375.52	538.19	73
Spreadsheet revenue ($)	5,551	15,114	23,964	33,166	43,789	58,887	59
Accounting units	67.93	158.08	255.18	421.26	652.57	1,003.87	71
Accounting revenue ($)	21,830	46,603	68,104	101,404	140,287	193,053	55
Other units	9.13	15.08	23.54	36.53	54.09	81.43	65
Other revenue ($)	4,110	6,114	8,586	11,993	16,247	21,634	39
Total units	258.97	557.77	904.37	1,399.78	2,084.29	3,074.14	64
Total revenue ($)	68,409	137,474	202,216	284,421	382,142	508,706	49

† CAGR—Compound Annual Growth Rate.

Source: Creative Strategies International.

Fierce competition among 3,000 software concerns

West Germany

JOHN DAVIES in Frankfurt

ONE OF West Germany's leading software houses and business consultancies, ADV/Orga F. A. Meyer, is about to go public with an issue of non-voting preference shares. The stock market launch is just the latest sign of the strong momentum in the country's data procesing and computer software business.

An estimated 3,000 software concerns are active in West Germany, though many of them are small outfits run by self-employed independently minded individuals.

Despite savage competition, the whole field of data processing and software promises rapid growth rates and is an obvious springboard for a stock market launch.

ADV/Orga F. A. Meyer, founded more than 20 years ago, changed its corporate status to that of an Aktiengesellschaft (AG) a few weeks ago in preparation for its stock market debut, which is being organised by Commerzbank.

Headed by Herr Friedrich Meyer, ADV/Orga is based in Wilhelmshaven but has consultancy and software business throughout the country. With about 400 employees, the company lifted sales revenue 28 per cent to DM 55.3m in the business year to June 30 and made pre-tax profit of DM 5.2m.

It has increased its nominal capital by DM 3m to DM 13m and about two-thirds of the newly created shares are being offered to the public. The shares wil be traded on the Frankfurt, Bremen and Hanover stock exchanges in the so-called "geregelte Freiverkehr" or second-tier market.

Nixdorf launch

As is often the case with companies being newly launched on the West German stock market, the public is not being offered ordinary shares but non-voting preference shares. This is in line with a widely held view in West Germany that family owners of businesses should retain control, rather than yield to outside influence, even though their companies make the transition to the stock exchange.

This was also the case earlier this year with the stock market launch of Nixdorf, the date processing concern headed by Herr Heinz Nixdorf.

Nixdorf's offer of non-voting preference shares raised the hefty sum of about DM 550m to pave the way for continued expansion. The company, which has strengths in both hardware and software, has set a target of doubling its sales in four years from the DM 2.7bn level of last year.

As the stock market upswing was strongly under way last year, the Munich-based SM Software was launched on the West German stock exchanges with an issue of ordinary voting shares. The concern was set up in 1980 by Herr Hans Beck, Herr Hannes Schiessl and Herr Josef Steiner, who had previously been self-employed programmers.

The company, involved in developing standard software for microcomputers, sold shares to the public at DM 200 each at its debut, which was organised by PM Portfolio Management, the Munich-based financial consultancy.

In the first dealings on the stock market, the shares traded at DM 570. They later reached a peak of DM 670 but have since lost ground.

As it forecast at the share sale, SM Software paid no dividend for 1983, and in fact registered a loss of DM 640.000 on sales revenue of DM 2.5m. A dividend is also considered unlikely on this year's results.

A high proportion of West Germany's software concerns are concentrated in and around Munich in Bavaria, as well as in the neighbouring state of Baden - Wuerttemberg. Both these states have been keen to foster new high-technology industries and to promote the nearest equivalent to a German

CONTINUED ON PAGE 5

Big shake-up in the market place

France

DAVID MARSH
In Paris

THE FRENCH software sector is leaping ahead with the same pent-up force as the micro computer market itself. The explosive entry onto the personal and business micro markets during the last two years of foreign companies in the form of Apple, IBM (with its PC) and Sinclair has ushered in a more dynamic and internationally-oriented approach among software suppliers and users.

For long hampered in its growth by users' reluctance to purchase programs not available in French, the software sector is now developing a much more healthy relationship with markets outside France.

To take just three examples of a shake-up in attitudes, Apple, which already has strong links with software companies and a large French-based dealer network, has set up a software production company in Metz in eastern France to develop programs for its new Macintosh computer.

Sinclair, which is studying plans to produce its ZX Spectrum-plus and QL home computers in France next year, is making a big effort to commercialise French-adapted programs for schools use. The company the leader in the French domestic computer sector (Sinclair's biggest market outside the UK), already has available 64 schools programs. These should assist its attempts to win a greater share of the national education sector which up to now has been largely the preserve of French companies led by Thomson.

Finally, on the software distribution scene, changes are also on the way. To meet burgeoning demand for more variety from PC users, Softsel, the Californian company which is the world's largest distributor of professional and recreational software, has recently set up operations in France.

And another sign of a flow of ideas from across the Atlantic is the setting up just outside Paris of a new French software distribution group, Axone, modelled on a leading U.S. software publisher, Microsoft Paribas, the nationalised investment bank, has a stake in both ventures.

All this activity has hardly been without effect on France's battery of computer services companies (SSIIs), which specialise in providing software and general information technology expertise for the professional sector.

The French service companies are the generally accepted European leaders in this field. Over the last decade they have become an important support for the overall French data processing industry—helping to compensate for disappointing performances in the hardware sector.

Problem solvers

According to the annual survey of the specialised French magazine Temps Reel, the 50 largest French SSIIs increased turnover by 22 per cent in 1983 to FFr 13.0bn, a slightly lower growth rate than in 1982. Significantly, around 53 per cent of overall computer service turnover comes from "intellectual services," such as consulting and specific problem-solving work. Sales linked to hardware — using of specific equipment or networks—makes up only 30 per cent.

The top French group, Cap Gemini Sogetti, last year realised more than 50 per cent of its turnover outside France, above all because of strong expansion (and the effect of the soaring dollar) in the U.S.

For the top 50 as a whole, however, 79 per cent of turnover comes from France and only half the group are present outside the domestic market.

The computer service companies in their business relationships with the Government and public sector companies have never profited from the systematic "buy French" support given in past years to the French hardware sector, focused on the now-nationalised Bull.

Indeed, it was an American company, Computer Science which in 1970 received the first government order for analysis of a specific computer project. And the SSIIs sometimes complain that Bull is too often likely to offer the administration its own software package in association with an equipment deal, cutting the service sector off from a possible source of orders.

None the less, the SSIIs owe a certain amount to public sector contracts. Cap Gemini Sogeti, for instance, has put into place the software for the electronic telephone directory videotex system gradually being introduced in French homes by the French telecommunications administration (PTT). And Steria has done a similar job for the Teletel electronic information project developed by the PTT in the Paris suburb of Velizy, aimed to serve as a forerunner of a nationwide system.

This activity can offer a springboard for important foreign orders. Cap Gemini Sogeti, for instance, has just won an order from the Norwegian PTT to supply software for the country's planned public videotex system, in association with the U.S. company Tandem which is supplying the hardware.

And Steria similarly clinched a FFr 35m deal last month to supply a videotex system for the Australian news agents cooperative, enabling 1,300 vendors in 13 towns to order newspapers and books and keep up-to-date records on stocks and accounts.

SG2, the No 3 French computer service group controlled by the nationalised bank Societe Generale, has also been building up international business. It was selected by the EEC to develop a pilot network throughout Europe to build an information exchange system as part of the Community's Esprit programme.

SG2 is also playing a major part in furnishing software for electronic funds transfer systems. It has already exported to Taiwan know-how developed in the experimental French point-of-sale shopping terminals scheme at Saint Etienne in SE France.

Elsewhere in the computer service sector, the air has been humming with restructuring activity designed to put the companies on a sounder footing to tackle international competition.

GSI, the computer services subsidiary of the nationalised Compagnie Generale d'Electricite group, is at the centre of a controversial plan to rationalise SSIIs which are already part of the CGE and Thomson empires (including Sligos and possibly Sesa) into a new and more powerful group. GSI itself earlier this year forged a technological link with Rank Xerox of the U.S. to develop artificial intelligence systems.

In another sign of international diversification, it has just opened a Swiss subsidiary specialising in giving bank clients instant access to financial and investment data.

In France, the SG2 has consolidated its position by taking over Ordina, a medium-sized SSII (ranking 22nd in the 1983 listings) which also has considerable expertise in the banking field.

In another regrouping, Segin, computer service subsidiary of the Credit du Nord bank, has taken a 46 per cent stake in Systems Laboratory (Syslab), a specialist systems company which has built up particular expertise with IBM equipment in banks.

Flotation

CCMC, the 6th ranking computer service group meanwhile has just became the first of its number to seek a bourse quotation, following its flotation on the unlisted section of the Lyons stock market at the end of last month.

Cap Gemini Sogeti, which with profits last year of FFr 72m, on FFr 1.4bn turnover, would be a sure hit with investors, has indicated that it could eventually seek a bourse flotation too, although it has no plans at present.

On a less bright note, Cap Gemini's rival in second place in the SSII listings, CISI, owned by the atomic energy commission CEA, has just underlined that not all foreign expansion leads to profits.

Following losses of FFr 108m last year, partly due to a FFr 30m deficit at its U.S. subsidiary Wharton Econometrics acquired in 1983, CISI is undergoing a thorough reorganisation.

The CEA is injecting FFr 100m in capital and is actively soliciting outside partners to take over CISI activities outside its mainstream business. CISI (in contrast to the overall position in the sector) last year drew 70 per cent of its turnover from equipment-linked business such as hiring out time on its computers to outside users.

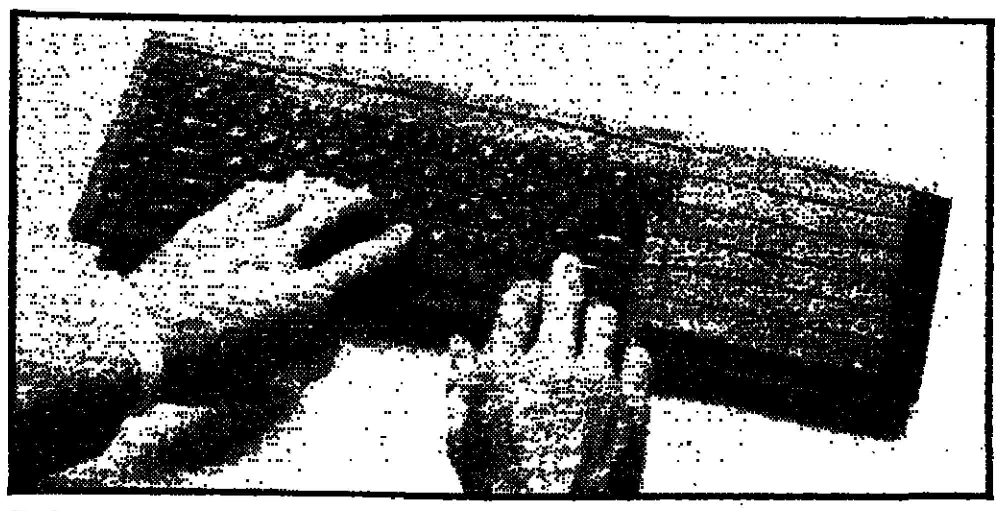
Falling demand for this type of activity helped account for last year's problems. And CISI now has to struggle to join the trend already established by Cap Gemini Sogeti of building up higher value-added business in consultancy and analytical services to industry and commerce.

French software vendors

Major independent packaged software vendors in 1983:

Company	Country of origin	Revenue $m	Market share %
Sema	France	11.5	6.3
CGI	France	9.6	5.2
Steria	France	9.5	5.2
SESA	France	7.8	4.2
TITN	France	5.7	3.1
Cincom	U.S.	5.6	3.0
Computer Associates	U.S.	5.0	2.7
Sopra	France	4.1	2.2
SG2	France	4.0	2.2
SPI	France	3.8	2.1
Other		117.4	63.8
Total		184.0	100.0

Source: IDC.



Sinclair's QL, supplied with its own powerful, integrated software suite, written by — and licensed from Psion. Sinclair is studying plans to produce QL computers in France next year and to commercialise French-adapted programs for schools

West German software vendors

Major independent packaged software vendors in 1983:

Company	Country of origin	Revenue $m	Market share %
Software AG	W. Germany	9.8	3.8
SAP	W. Germany	9.2	3.6
ADV/Orga	W. Germany	8.7	3.4
Softlab	W. Germany	6.7	2.6
Cincom	U.S.	6.6	2.6
Computer Associates	U.S.	6.5	2.5
ACI/UCC	Switz./U.S.	5.2	2.0
ADR	U.S.	4.5	1.8
VisiCorp	U.S.	3.5	1.4
MicroSoft	U.S.	3.1	1.2
Cullinet	U.S.	2.6	1.0
Other		190.6	74.2
Total		257.0	100.0

Source: IDC.

Fierce competition

CONTINUED FROM PAGE 4

"Silicon Valley." But West Berlin, too, has been taking many initiatives to attract and finance innovative concerns.

West Berlin was the scene recently of the first large-scale congress devoted primarily to the software business in West Germany, known as Compas '84.

This congress served to highlight the steeply rising demand for software in West Germany and the difficulty of speeding up the provision of software solutions to problems, through such means as software engineering.

There was also stress on the need for "user-friendly" software to smooth the process of worker re-training as computer systems become more widespread in West German workplaces.

As elsewhere, software is becoming an increasingly large part of the outlay on data processing in West Germany. At present software is estimated to account for about 30 per cent of the total expenditure in this field, but by the end of the decade it is thought the proportion might approach 50 per cent.

Because of the cost of hardware and software and the sometimes bewildering array of alternatives, many users are looking more to concerns which can provide or advise on data systems including software.

One leading management consultancy and software house, Roland Berger, has estimated that the amount of money spent in West Germany this year on advice about data processing and software will exceed the amount spent on classic management consultancy and that the gap will widen in the next few years.

According to the Frankfurt-based Diebold management consultancy, most companies are still not aware of the significance of data processing as a way to strengthen their earnings and competitiveness.

In a recent study, Diebold also said that a lot of application software in use in West Germany originated in the 1970s and was no longer appropriate because of the development of more powerful and complex systems.

With West Germany becoming more concerned to make headway in information technology, there is growing emphasis on computers and elementary software in schools.

Dr Roland Schwetz, a senior Siemens executive, recently referred to software technology as the basis for future economic success. He said that experience with computers and software should be provided as quickly as possible in all areas of education in West Germany.

Although local concerns provide much data processing software in West Germany, U.S. and UK companies also have a strong hold, particularly in supplying standard products and services. Foreign companies which have been benefiting from fast growth in the U.S. and the UK are being increasingly attracted by prospects that the West German market is gathering momentum.

Expansion

Microfocus of the UK has just set up its own subsidiary in Munich to carry out marketing in West Germany, Austria and Switzerland, with emphasis on its Cobol software tools for microcomputers and personal computers.

Last year Microfocus earned 58 per cent of its sales revenue in the U.S., 27 per cent in Japan, 13 per cent in the UK and a tiny 2 per cent elsewhere. The company see considerable scope for improvement in Europe, according to Herr Erik Tonnesen, general manager of the Munich subsidiary and a data processing and marketing specialist formerly with Siemens and Nixdorf.

Peachtree International is also pressing sales in West Germany through its link with RHV Software Technik. Its distribution network includes the Metro supermarket chain, as an outlet for microcomputer software.

New techniques hold the key to the future

Software engineering

ALAN CANE

A NEW and powerful emphasis on software engineering over the past few years serves to illustrate the extent to which the computer industry is taking its own medicine.

Using computers to aid in the design of the complex circuitry written on to silicon chips or in the layout of printed circuit boards is comparatively commonplace, these days. What is new is the trend towards using these computer-aided design techniques in the construction of complex and sophisticated software.

To the lay person, such an approach might seem only commonsense, but in the computer industry, where the construction of large suites of software has always been regarded as akin to a black art, it is quite revolutionary.

Mr Roger Crabb of the U.S.-based services firm Computer Sciences Company noted in a recent report: "Software engineering techniques are primitive. Most software is still developed with no formal methodology, the software development process is poorly supported by automatic tools and the testing process often consists of trial execution with sample data chosen almost at random."

"As a result, the software is unreliable and there is no guarantee that the results given by the software are correct."

Poor record

A pretty damning indictment, but fully justified by the software industry's fairly awful record of completing projects on time and on budget.

The UK-based consultancy Pactel discovered, from the results of a study it carried out in 1984 into more than 200 UK software projects, covering all types of application, that two-thirds cost more than budget. More than half failed to meet their deadlines.

It was a depressing discovery, but hardly surprising. In the early 1960s when IBM was in the latter stages of developing its System/360 family of computers—certainly the most significant development in commercial data processing history—it estimated its costs at $675m of which $35m was to be spent on software development.

The software programme was plagued with problems and within two years the estimated cost had been raised to $60m. At first it was thought some 200-300 programers would be required. Emerson Pugh, an IBM research scientist, wrote: "By the end of 1965 there were 2,000 programers working on System/360 software at a cost of over $60m a year, causing Fred Brooks (the manager responsible) in frustration to assert: "Adding manpower to a late software project only makes it later."

Mr Brooks had stumbled, through hard experience, on one of the basic truths of software development; more than a decade passed before Mr Laurence Putnam, then an adviser on software budgets to the U.S. Department of Defence, was able to show, first empirically and then by detailed mathematical analyses, that the development; more than a suites follows a common pattern.

He found that there was a distinct limit to how quickly a given software project could be developed, given that three or more people were involved that the project would take at least six months. In other words, large projects take time. And trying to take them to completion too quickly by throwing in more staff does more harm than good.

Mr Putnam has now computerised his model of software life cycle management. Called SLIM, it is an important software engineering tool.

So what is software engineering and why has it suddenly assumed such importance? The UK Government's Alvey committee on advanced computing, after all, picked it out as one of the key enabling technologies for the future, while many companies, from the massive GEC downwards, have established departments to develop software engineering expertise for their own use and to sell to others.

One of the most recent additions to this list is the UK computing services company Logica, already noted for its work in datacommunications software, especially in the financial sector.

The Logica project is called Sesame. According to its manager, Mr Keith Southwell, the aim is to discover ways of producing software more cheaply and "less riskily." He expects to be able to achieve, in some cases, a ten times improvement.

The basic aim in all software engineering research is to find ways of producing software in a more reliable, more professional manner. This becomes increasingly important as the size of the piece of software becomes larger.

A typical computer game, for example, may consist of a few hundred lines of computer language. Software engineering techniques need not be used for such a task although they could certainly make it easier. One of the major personalities in software engineering, Mr Edward Yourdon defines four classes of project.

● First, the *simple*—those involving up to 10,000 lines of computer code and requiring three or four programmers for six to 12 months. (Note: even simple projects fit into Laurence Putnam's SLIM model.)

● Next there are *difficult* projects involving 10,001-100,000 lines of code.

"There is a non-trivial danger," Yourdon asserts "that the project will be finished several months late and that it will exceed its budget by tens of thousands or even hundreds of thousands of dollars."

● Hair-raising enough for most, but Mr Yourdon goes to to define *complex* projects involving up to 1m lines of code ("even the most battle-scarred veteran would admit to a certain amount of nervousness") and the *nearly impossible*: "There have been only a handful of projects involving between 1m and 10m lines of code. Conventional techniques and a conventional project life cycle are almost guaranteed to fail with projects of this magnitude."

What is driving software engineering specialists like the Wang Institute in the U.S., Imperial Software in Britain and individual companies such as Systems Designers and Logica, is the acute realisation that the difficult to nearly impossible categories define much of the critical software that will have to be written for tomorrow's telecommunications, financial, retail, defence and other systems.

According to Mr Roger Crabb of CSC, there are two fundamental approaches to software development: functional decomposition and modelling.

Functional decomposition emphasises the early definition of system requirements and the breakdown of the overall problem into a series of sub-problems. As examples of this approach, Crabb chooses McAuto/IST's "Stradis." Arthur Andersen's Method-1, BIS's SSD, Softech's SADT and CSC's DSDM-II.

User's world

Modelling, Mr Crabb says, involves the need to build a logical model of some view of the user's world; these can be either data models which have no concept of the passage of time or process models which describe the real world in terms of process entities and their connection.

So-called "fourth generation" languages are becoming increasingly important for system design and the automatic generation of computer code. One example is DMW Group's USE.IT; Sperry's Mapper and Burroughs' Linc are others. James Martin, chairman of the DMW Group and one of the computer industry's more significant communicators said at its launch.*: "When people in the year 2,000 look back on what we're doing today, they will regard our programming techniques as being rather like an engineer building a bridge without stress calculations."

Most software specialists are agreed that there is no universal panacea which can solve the problem of managing the development of large software projects.

A common approach, therefore, is to assemble a portfolio of methods and software production tools (editors, fourth generation languages and so on) which can offer something to most projects.

The work of these groups is probably the most vital in computing today; on their efforts depends the success of every major data processing project for the foreseeable future.

**Training and selection of computer personnel. MSC, £2.50.*

MSA (Management Science America) has the largest software education centre in Europe and offers training for 200 people a day in the UK with 50 on-line terminals. MSA became the largest independent computer software company in the world with more than 12,000 systems in use through its dedication to the sales of business packages for accounting, purchasing and so on. MSA has training centres in Maidenhead, Berkshire, in the UK, and at Brussels, Belgium, and Rud, Norway.

Many UK employers have not yet started to select or train staff for vital computer skills, according to recent reports

Industry faces big challenge

Training and education

MICHAEL DIXON

FEW THINGS could be more important to any organisation than the task of ensuring that its key jobs are done by people with the aptitudes and developed skills to do them well.

The task would seem to be especially important in the computer field today when most authorities are forecasting that new information-processing technology will have spread into almost every branch of business and public services by the end of the next 10 years, if not within the next five.

The communications technology — which might be viewed as a hyper-advanced version of reading, writing and arithmetic — is at a stage comparable with that reached by the traditional "Three Rs" around the ninth century BC.

Their use had previously been confined to small enclaves of esoteric specialists who, since no one else could understand and manipulate the symbols involved, could be content with being equipped to communicate with one another.

From the time the Phoenicians developed a more easily learnable and usable alphabet whose symbols recognisably related to the basic sounds of everyday speech, however, simply possessing the techniques of the Three Rs became less and less effective as a means of earning a living.

For anyone wishing to go on prospering, that meant learning to understand not just the techniques of communication, but also at least some of the activities which ordinary people communicate *about*.

Evidence that software staff are now facing a comparable challenge has emerged recently from a study sponsored by the Manpower Services Commission.* The survey covered more than 500 organisations employing programmers, analyst-programmers and systems analysts in Britain as well as institutions providing relevant training.

They were consistent in the view that such staff would need far broader knowledge and skills in future.

"In this respect great emphasis was given to the business/commercial aspects of computer use. In addition, it was felt that there would be a need for analysts and design skills rather than straightforward programming. Companies would be seeking high quality personnel with more of an all-round capacity," says the survey.

The trouble is that the survey also found that, although able to agree in generalised terms on the different kinds of software staff required in the future, most of the employers taking part had not started on the way to providing themselves with appropriate means of selecting and training the necessary skilled people.

Early days

Indeed, in their selection habits many of the organisations were less scientific than superstitious in that their methods often ran counter to the evidence on the attributes needed for success in programming and systems analysis.

For instance, the majority would not even seriously consider young people as candidates unless they had pass grades in the Advanced-level academic examinations at 18-plus.

Yet the National Computing Centre has shown beyond doubt that youngsters can train for, get and flourish in jobs as programmers although they have no pass grades in the less demanding 16-plus exams, let alone at Advanced level.

What is more, if people's results at A level testify to their respective intellectual abilities, then the same people's performance in their subsequent degree exams seems to testify to something else because the two sets of results are not correlated.

Given that software staff will increasingly need broad understanding of business and other practical activities, employers' prospects of obtaining the right people will only be lessened by continuing insistence on A-level passes.

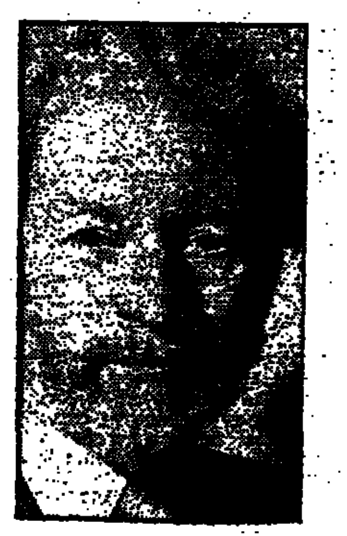
It will lead parents to maintain their pressure on schools to leave aside the development of pupils' practical abilities so as to concentrate on pushing them through exams in ever more specialised academic subjects which, as the British Institute of Management among others has lately complained, is limiting the practical usefulness of young people leaving our education system.

The waywardness of the prevailing selection habits is further emphasised by the survey's finding that the employers' main complaint was that new recruits were deficient, not intellectually, but in the necessary so-called personal qualities.

But, the report adds, "despite this emphasis on personal qualities there is no evidence . . . of any systematic attempt to assess these qualities" apart from interviewing which is notoriously unreliable when it comes to pinpointing personality traits.

To cap it all, in almost 40 per cent of the employing organisations the software staff were not offered any formal training at all.

Hence the report's conclusion that the survey's findings are "alarming and challenging at the same time" the most urgent challenge to the British computer industry being to lose no time in becoming at least as systematic and rigorous about selecting and developing its liveware as it is about its software and hardware.



Mr George Penney, the careers projects manager at the National Computing Centre, points out that there is a crisis facing UK information technology, due to the lack of attention paid to the mounting problem in the past 15 years.

"Since Japan became a threat in this, as well as in other high-technology industries, we have had Information Technology year in 1982 and Alvey. U.S. domination before that apparently went unnoticed . . . but the IT boat won't wait," he says.

Major third party vendors

Western Europe's top 10 vendors in 1983:

Company	Country of origin	Revenue $m	Market share %
IBM	U.S.	279.0	3.0
SG2	France	144.7	1.5
Cap Gemini Sogeti	France	139.1	1.5
GSi	France	128.8	1.4
Geisco	U.S.	112.9	1.2
Scicon Int.	UK	110.4	1.2
Datev	W. Germany	108.9	1.2
CISI	France	98.0	1.0
CCMC	France	83.9	0.9
Telesystemes	France	77.3	0.8

Source: IDC.

Good news for users

Micro operating systems

PHILIP MANCHESTER

COMPUTERS NEED operating systems, just as cars need steering wheels and brakes. Although nothing more than rather special programs, operating systems make the use of a computer a lot easier than if they were not there.

If you imagine having to stop your car and turn the wheels manually everytime you wanted to turn a corner, then you will have some idea of what life without an operating system would be like.

In the world of microcomputing, operating systems have become so important that their production and adaptation for many different microcomputers have kept a significant number of software companies in business for the last five years.

Three separate strands have evolved over that period, each dependent upon the microcomputer technology being used.

- Digital Research's CP/M system and its offspring has gained ground in the first generation of microcomputers—those usually referred to as 8-bit machines.
- Microsoft's MS/DOS (and its identical twin, IBM's PC/DOS) has dominated the second generation or 16-bit machines — mainly because of IBM's strong support on its personal computer range.
- The third strand of development includes a range of systems that seek to challenge these two market leaders by offering either better user features or a better use of the technology itself.

It is this third area where the most interesting developments are taking place. This is partly because of the innovative nature of software development but also because it is feeding back into the development of MS/DOS and CP/M.

Early in November both Digital Research and Microsoft made significant announcements reflecting this cross fertilisation of ideas.

The former announced a graphics-based "front-end" (that is the part that the computer-user sees) that owes a great deal to the recent work done by Apple Computer with its highly innovative Lisa and Mackintosh computers.

More features

Digital Research's Graphics Environment Manager (GEM) embodies many of the ideas—the use of "icons" to represent a computerised desk top, the use of the mouse device to "drive" the system and the ability to have several different programs running at once viewed through different user specified "windows."

Microsoft has already announced similar features to add to the MS/DOS operating system although there is some doubt as to when they will be available.

Digital Research promises GEM for early January, 1985. At the same time, Microsoft announced networking support for MS/DOS users, allowing a number of microcomputers to be plugged together to share expensive resources such as hard disks and laser printers.

Both of these announcements provide strong pointers to the direction that personal computing will take over the next couple of years.

The GEM interface and Microsoft's Windows interface should make it far easier for a new breed of computer user to operate personal computers if the initial reception of this technology on Apple's Lisa and Mackintosh is anything to go by.

To return briefly to the driving analogy, this type of technology not only provides the computer "driver" with a steering wheel, it also hides the idea of the operating system so users do not have to even think about it being there.

The ability to connect several computers together in a network, as embodied in Microsoft (and earlier Digital Research announcements) networks product also suggests several new directions.

Mr Bill Gates of Microsoft sees networking as not only adding to existing applications of personal computers but creating new ones.

"Laser printers offer a wider range of facilities and this will inevitably feed back into application development," he observed.

"It also makes it far more convenient to move data from user to user."

But more important, the ability for a number of computer users to share the same database could mean the kiss of death for what are called "multi-user" systems.

These systems are very much a hangover from the previous age of computing where many users were provided with very simple terminals, plugged into a large computer. The operating system shared out time on the computer to the various terminal users and provided access to a common database.

The answer to this problem on microcomputers has so far been to replace the large computer with a powerful micro.

Ironic twist

Unfortunately, this answer has proven less than satisfactory. "It has been cheaper in the past to buy multi-user systems. But with networking, the single-user micro, plus the networking, will become the dominant form," said Mr Gates.

Ironically, one of the most important multi-user operating systems — Unix — has been developed by Microsoft under the name of Xenix. In fact the vast majority of Unix users actually use Microsoft's version with figures of two thirds of the 80,000-100,000 Unix community being quoted.

Mr Gates was coy about the lack of networking support for Xenix—it only being available for the MS/DOS user at present.

"We are slowly bringing MS/DOS and Xenix together but the technology is not really there yet to complete the merger," he said.

Over at Digital Research, the problems of getting a computer to run more than one program at once—or multi-tasking, as it is called—appear to be occupying most of its time. The GEM interface is part of that development and can be used with Digital Research's most recent operating system announcement, the Concurrent CP/M.

In practical terms, a multi-tasking operating system will allow a user to be printing out a letter whilst receiving electronic mail from the network and maybe playing around with a spreadsheet, all at the same time.

Digital Research has flirted with multi-user systems with its M/PM product but this did not meet with the same success as CP/M in the market place.

The sum total of these developments point personal computing firmly in the direction of offering a range of services (through the network) in an easily accessible package, (using the graphics-style interface).

As far as operating systems are concerned, the trend appears to be towards holding as much of it as possible from the user. This is supported by software companies involved in developing applications which are using Unix-type operating systems to develop products, but going to great pains to hide Unix itself from the user.

Mr Selby Milner, managing director of Mills Microsystems, among others, suggests: "It is essential to make Unix invisible to business users—it is completely inappropriate in accounting systems."

Hiding the inner workings of a computers "steering" mechanism from the "driver" can only be seen as good news for all personal computer users.

Services in Western Europe

The top 10 professional services vendors in 1983:

Company	Country of origin	Revenue $m	Market share %
Cap Gemini Sogeti	France	137.3	3.7
Scicon Int.	UK	84.5	2.3
SG2	France	81.8	2.2
SESA	France	52.3	1.4
Sema	France	50.3	1.4
Volmac	Netherlands	42.3	1.1
Steria	France	39.9	1.1
Telesystemes	France	34.8	0.9
Logica	UK	34.6	0.9
Datema	Sweden	32.2	0.9

Source: IDC.

Fierce debate within IBM community

Mainframe operating systems

PHILIP MANCHESTER

AS THE awareness of computing has increased, the importance of software in computer systems has increasingly come to be recognised. Software is the mechanism whereby a pile of electronic circuitry is persuaded to do something useful for us.

Whether it be a word processing package, a large payroll system or a satellite control system, the system that makes the computer world go round is software. Furthermore, the financial investment in software is now seen as being far greater than that in the hardware used for its execution. It is estimated that in the U.S. alone $20bn per annum is spent in just maintaining those programs.

Users of computer systems have built programs to perform certain tasks relevant to the way their business works and wish to preserve that investment.

At the same time, computer manufacturers are anxious and indeed obliged to sell evermore sophisticated technology to improve the way these systems perform, as well as catering for their inevitable growth.

The key to reconciling these two seemingly opposing ideas is a piece of software which sits between the user's own programs and the computer. It is called, loosely, the "operating system" and it has been used by computer manufacturers quite successfully to move computer-users across increasingly sophisticated computer systems without sacrificing the substantial investment they have made in their own software.

All computers have operating systems and the bigger the computer, the more it is expected to do. In a small microcomputer, the operating system is confined to providing ways of organising and accessing data.

On a large mainframe, it will not only be expected to do all of that, but it will also be charged with controlling the terminals connected to the computer, sharing out the computer time and a whole host of other things.

Generally speaking an operating system is a piece of software that looks after all of the internal needs of a computer system—all of the things that the user is not interested in and does not want to know about.

Unfortunately, this does not mean that we can forget about them. Operating systems also exert a significant influence on what happens outside of the computer as well.

The number of terminals a computer can support, the size of the database it can handle and the efficiency of the system as a whole are all dependent on the operating system.

In mainframe computing at the moment, there is mounting concern over the future of operating systems. Nowhere is this more fiercely debated than in the IBM community.

Although IBM did not invent the operating system, it most certainly enshrined it as an important component in a computer system. When IBM launched the 360 computer 20 years ago, it established a standard operating system. And, with the same shrewdness that prompted IBM to call its business microcomputer the Personal Computer, it called its operating system, Operating System (or 360/OS among engineers and programmers).

High pressure

Despite many changes in the hardware of its computers, that same piece of software — now much enhanced and extended — still exists on the medium to large IBM computers of the 1980s.

The reason for this goes back to the purpose of operating systems as described above. It was the only way that the user's software investment could be protected while moving the software to newer, more powerful and more economical hardware.

So great has the pressure from users been to keep to this standard that the central part of the IBM operating system has remained unchanged throughout two decades.

This strategy has not been without its problems, however, and the current debate on operating systems is directly concerned with the problems that arise from using obsolete technology. For historical reasons, IBM has three different operating systems for its mainframe computers. The original Operating System has mutated into a system called Multiple Virtual Storage, (MVS).

This tends to be used by larger IBM computer-users and has grown to vast dimensions. One IBM expert suggested that no serious IBM-user would contemplate running MVS on a machine of less than 8m characters of main memory (eight megabytes). Even by today's standards, that is a very large computer.

Because of delays in building the original operating system, IBM in the 1960s put together what was seen as an interim system called Disc Operating System (DOS). The two systems are very different and programs built for one cannot use the other.

In Europe at least, DOS dominates the medium to large user market, despite constant pressure from IBM for them to move to the larger and more comprehensive MVS. Cynical observers of IBM suggest that such a move means that IBM can sell more large-size machines and derive even greater revenue from hardware sales. But that view is only part of the story. The fact is that as long as IBM has to support two main operating systems it is spreading its resources too far and holding back further development on both.

Complications

If that were not enough, IBM also has another system called Virtual Machine (VM). Although this is not, strictly speaking, an operating system in the way that MVS and DOS are, it can achieve many of the same things and, therefore, complicates the situation even further.

The concept of the Virtual Machine is quite simple—it allows a single computer to pretend to be several computers. Software running in the virtual machine, conceptually, has a whole machine to itself.

This means that an MVS operating system and DOS operating system can, theoretically at least, sit side-by-side in the same computer—each within their own virtual machine.

In light of this knowledge, it is no surprise that IBM is keen to bring its DOS-users on to the VM bandwagon. A significant number of users have already made that move. It is estimated that half of the DOS-users in Europe are running VM systems and this trend is gathering momentum.

Having wooed the DOS-user to VM, it should not be so difficult to complete the move to MVS—allowing a transition period where both systems can be used.

At the same time there is growing dissatisfaction in the IBM-user community over the complex and now somewhat out-of-date ideas embedded in MVS. So, even if IBM succeeds in its goal of bringing all its users on to a single operating system, it will still need to address that problem.

If it does not do this—while, at the same time, preserving the substantial investment that users have made in application software—it could well see other alternatives being tried by IBM-users.

Although experts do not generally see Unix as competition for MVS (the two systems have entirely different backgrounds and priorities), a warning note was sounded at a recent European user-group meeting.

A number of users expressed a desire to discuss IBM's policy on Unix (to all intents and purposes, IBM does not have one). This is the first time that AT and T's Unix operating system has even been mentioned in such a context. It will not be the last.

A mandatory buzz word of computing

Integrated software

CLAIRE GOODING

THE golden rule of the seventies was: base your sofware purchases on the CP/M operating system, because every application you will ever need works on it.

The rule of the early eighties was: buy MS-DOS for exactly the same reason, and the additional one that IBM says so. And for the mid-eighties?

Here it is:

Never, but never, get caught putting your data in more than once. Data capture is tedious enough the first time round.

Hence the new mandatory buzzword of computing: the integrated software package. The word "integrate," like most vocabulary adopted by the computing fraternity, has assumed its own meaning without losing its essence. The main aim of integrated software is to make programmes work together harmoniously, with as little trauma as possible when making the transition from one function to another.

Historically, even the most flexible software has been extremely limited in its environment. For example, however happy a user is with a single-user payroll package, it may prove impossible (or expensive) to take that particular application and run it on a machine with a different multi-user operating system.

Time was when every application had its own data, written into it as the programmer saw fit at the time. Then along came the database — a pool of common data which can be used in many different programmes. Many package vendors integrate their applications this way, perhaps passing data between a stock and an accounts system via a database.

The database makes it easier to traffic data between programmes, but you have to be sure that you pick a database, or a range of packages, which will not limit your system in the future.

Database techniques paved the way for integrated applications but there are still protocols which defeat the movement of data from one environment to another. The classic example is the "standalone" microcomputer user, who may have to spend hours typing in data taken from a mainframe printout, instead of being able to "lift" the data ready-made.

Thornier problems arise when you want to use data for something other than its original purpose. That can happen easily once the computer has become part of the office routine. Users start to look beyond the scope of their present software, and wonder what other jobs can be computerised.

For example, take the 80 per cent of IBM Personal Computer users who are said to have bought the machine solely to run spreadsheet programmes, (primarily the 123 programme from Lotus Development Corporation). Unless they have bought with unusual foresight, they come up against the usual barriers once they start to spread their hi-tech wings. The spreadsheet bought from A doesn't work with B's accounting packages, or C's word processor, and so on.

Software vendors have quickly become wise to this, and several have produced integrated "suites" of packages which can work together sharing the same data.

One such company, the software giant, MSA, has even linked its accounting software to Lotus' 1-2-3 spreadsheet.

Co-operation

Now that IBM has entered the applications market, more independent suppliers might "join hands" this way, co-operating in the face of competition.

One approach to integration is the "windowing" of tasks, popularised by Apple's Lisa and Macintosh machines. Windows display several activities on the screen at once, and users can shuttle between tasks without losing sight of them.

IBM Personal Computer users can also play with windows. IBM's own rather late implementation left the field clear for other products: Visicorp's VisiOn, complete with applications, the Windows product from Microsoft, originator of the PC-DOS operating system, and Digital Research's ingenious Concurrent CP/M, which opens the doors between CP/M and MS-DOS applications.

Lotus Development Corporation promised to supply the next milestone in integration with its new product Symphony, the follow-up to the 1-2-3 spreadsheet. Symphony, starting with the established spreadsheet principle, brought new elements into the environment — communications, word processing, and other facilities, so that all elements could be used together.

Lotus chose the name Symphony to portray the user as a conductor of many different parts. But, as even the favourable reviews suggested most people find it hard enough to play one instrument without having to understand the entire score.

Although it has been praised for the way it speeds up operations and provides more control over information, Symphony has so far failed to sweep the board as did its forerunner Lotus 123. Lotus 123 was superbly easy to use. Manoeuvring between environments demands rather more versatility.

Getting to grips with any new computer tool is not unlike learning a foreign language. You have to learn some "grammar," whether you aspire to write poetry or simply need to understand the road signs. A product as ambitious as Symphony has to cater for both sorts of user.

The integrated software package, like everything that has preceded it, will probably be hawked as the ultimate answer to your software dilemmas. However, even Mr Mitchell Kapor, chairman and chief executive of Lotus, has expressed his doubts, speaking at the recent Financial Times Professional PC Conference.

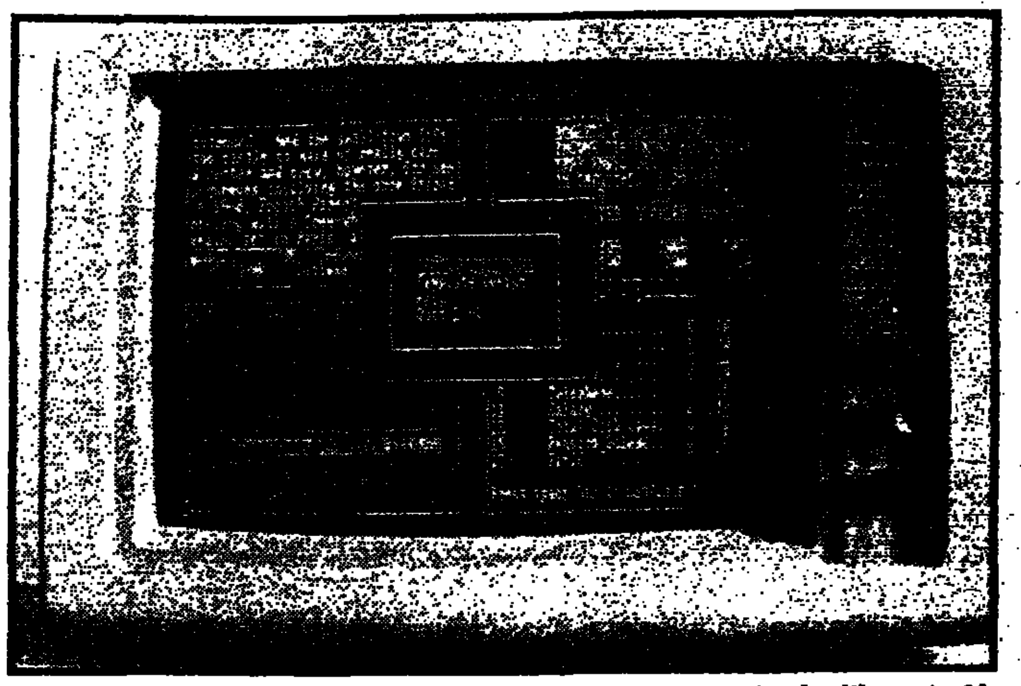
"I don't believe that integration is a panacea. Value for customers is more important than integration. There is no single solution."

So far, every generation of computer users has faced the same problem: "conversion" from one system language, or package, to another — even from one release of a product to another.

Passing data from one application to another now looks comparatively easy. The trend in the 80s has been away from "locking in" users to a particular supplier, and towards creating as many options as possible: hence Unix, Pick, and the other portable operating environments.

No-one, so far, seems to have found their way around the inevitable equation. As the software becomes more powerful, so the users need to become more skilful, and more versatile.

So, it might be added, do the software marketers. Users sometimes just don't know what's good for them.



Decision Manager—Up to 20 windows or projects can be defined with up to 10 displayed on the screen at any time. The innovative "cut-and-paste" windows give the user full integration of applications being used

Big orders for financial software

SHARP Electronics, one of the largest suppliers of consumer and business high-technology products in the UK, has ordered £100,000 worth of software from MSA (Management Science America), comprising the general ledger and accounts payable on-line packages.

Implementation of the software, scheduled for this month, marks the final stages of a two-year switch to IBM hardware and IBM-compatible systems, at Sharp's Manchester head office.

Sharp, which employs 300 staff in the UK, has seen substantial growth and its latest turnover figures exceed £150m. Worldwide, the company operates in 135 countries with a total turnover of more than £3bn.

BP Oil, the refining and marketing arm of the BP group in the UK, has also ordered £100,000 worth of MSA software, comprising the General Ledger and Accounts Payable On-line packages, and the Easy-Screen generator system.

At BP Oil, however, the new software will run on Sperry equipment, an 1100/81 mainframe, at the company's computing and accounting centre in Hemel Hempstead, Hertfordshire. MSA on-line software is now fully available on Sperry hardware and supported by a co-operative MSA/Sperry agreement.

* * *

£9m ORDER: Barclays Bank has ordered a further 600 computer systems from Digital in support of its branch controller project. The latest PDP-11 based micro systems utilise the powerful J-11 chip and are configured with the 31MB RD52 disk drive.

* * *

A COMPREHENSIVE package for publishers, available on the Alpha Micro range, is gaining acceptance in the UK. The system, called Imprint, covers every aspect of publishing from administration to production and was developed by Sweetens Computer Services of Preston, Lancs.

The system, written in Alpha Basic, is already in use at 12 publishing companies. The financial director of Sweetens Computer Services, Mr Christopher Sweeten, says: "As far as I know, there is only one other such system available commercially and that is priced at more than £100,000."

He added that with the Alpha Micro, "our prices start at one tenth of that cost. Even with four VDUs and three printers, the system costs less than the former minicomputer configuration, with only one VDU, from which IMPRINT was originally transferred and enhanced."

* * *

COMPLETE business systems, turn-key solutions, business applications software and system enhancements will be featured in Dexpo Europe '85—claimed to Europe's major DEC compatible industry exhibition. The event will be held from March 6-8, 1985, at London's new Olympia 2 complex.

The wide range of business applications that DEC and DEC-compatible systems can fulfil will all be demonstrated at the show. Computers, ranging from single user micro-based systems, through multi-user Super-micros to large networked mini-based systems will be displayed with a full range of applications software.

Solutions are a long time coming

Micro links with mainframes

CLAIRE GOODING

ONCE UPON a time you managed without a micro—in fact, you may even have survived without a calculator.

Now the pressures on any business are such that the way a company manages data can make the difference between success and failure. These days, data management means not merely the mainframe in the department, but the executive workstation (formerly known as a microcomputer), on the desk. To get the best out of both information tools, there should ideally be a link between the two.

The microcomputer crept in through the back door of corporate computing. Standalone micros appeared on desks almost as an act of defiance to the DP department—"no use asking that lot—they'll take weeks," said the maverick user. "I'll do it myself on the Apple."

True enough, the results came more quickly. But however efficient the system and the user, it generally took a long time to enter all the data for a forecast or a one-off report—data that probably came from a mainframe printout in any case.

A worse problem was that the data held on the mainframe and that entered manually on the micro soon diverged. That alone limited the usefulness of the "independent" micro, which could neither share the information available elsewhere, nor benefit anyone else outside its own domain.

Microcomputing became respectable almost overnight when IBM entered the market with its Personal Computer.

There was a rush by the mainframe software suppliers (suddenly assured of a huge audience), to team up with microsoftware houses. The main push was to take database software from the lofty realms of the mainframe and make it work for the new generation of non-expert users.

It has taken longer than anyone expected to deliver the dream of micro and mainframe working in harmony. End-user computing usualy consists of three major tasks: retrieval, manipulation, and maintenance of data. Not all micro-mainframe links cater for all three problems.

Developers chose different routes, ar adapted the "downloading" principle to work with their particular database.

As with everything else in computing, there was no single solution.

The micro, in effect, became an intelligent terminal, attached to the mainframe, or connected by a modem for the stay-at-home worker. More difficult to solve was the principle of how much power an end-user should have.

Data integrity

Data processing people spend a lot of energy maintaining "data integrity"; the less glamorous side of security. They deal with the accuracy and reliability of data, and generally keep things in order.

Not surprisingly they take a proprietorial view of the company's precious data, which is only useful as long as it is correct.

While programmers are often delighted to offload some of their backlog, there are dangers in handing power to end users. Someone in the DP department must act as controller and vigilante.

It may be wonderful for the financial director to tap real live data for experiments with forecasting and salary levels. The experiments, however, must not interfere with the bread-and-butter production programmes such as payroll and accounts receivable.

Another problem is that of giving too much access to too many people. Most products use passwords as a way of barring unauthorised access. Unfortunately, most users cannot be bothered with elaborate time-wasting precautions, and often the password is an easily-guessed pair of initials.

Even if the company's computing resources are treated as a network, attention inevitably centres on the mainframe. The workstations may contribute a great deal in terms of data input, but the information still has to be retrieved centrally.

The mainframe fulfils a great many functions, looking after various peripherals, sharing its time betwen tasks, and opening and closing files as various users request them. So there is bound to be a certain amount of protocol to wade through when the micro becomes a cog in the mainframe's mighty wheel.

Moreover, mainframe databases were not designed with novice users in mind. Making them less hostile to micro users has not been easy.

Nevertheless, the well-known names in mainframe software have all hailed the micro-mainframe partnership as a way of delivering real productivity. Most have an offering of some kind, even if the glossy literature preceded the working software by some months.

"The PC has given us a chance to deliver real productivity," said Mr Vic Morris, vice-president of international operations in a leading mainframe database firm, Cullinet. "This time it isn't just a cliché."

Most users cut their teeth on spreadsheet applications such as Lotus Development Corporation's 123 or its earlier counterpart Visicalc. Forecasting, modelling and decision support are still the prime targets for micro-mainframe links.

For those applications the "intelligent terminal" approach copes with most needs. The user takes data from the mainframe, using the micro-mainframe link. That data is treated like an expendable carbon-copy: the micro user can do whatever he or she likes with it, to reach whatever results are wanted. The "copy" is then jettisoned, or stored locally. None of the changes or the results can be fed back to the mainframe.

Several companies supply such links, including Cullinet, Informatics, Mathematica, and McCormack and Dodge. Some firms—notably those who are late into the database field—have tackled the problem of making two-way conversation between micro and mainframe.

ADR, once known for mainframe utilities, is now offering PC Datacom, a database and family of applications which works both ways, and looks exactly the same on micro and mainframe hosts. Computer Associates, another late entrant into database and micros, offers an equally versatile package, CA-Executive, which can transfer updates to the mainframe. Information Builders' PC-Focus, another micro replica of a mainframe database, can also be used for data entry.

Sensible view

MSA, the world's largest software house, took a slightly different approach. Based on the sensible view that users were largely tied by what they already had, MSA built application-specific links into its widely-used accounting software.

MSA takes pride in being the first company to sell and install micro-mainframe products, and boasts over 350 installations of its Executive Peachpak.

While MSA is divesting itself of its micro arm, Peachtree, it is significantly keeping a tight hold on Peachpak. Despite being less versatile than a database link, MSA's solution patently works, and last year the company claimed revenues of more than $8.4m on micro-mainframe sales alone.

MSA also foreshadows further developments by linking with Lotus 123 — essentially a rival to some of its own products. The micro-to-mainframe link is only the beginning, as it gives users freedom within one supplier's environment.

In the face of growing competition from IBM itself, independent suppliers may well be forced to build such bridges in self-defence.

U.S.-based suppliers dominate the sector

Computer-aided design

GEOFFREY CHARLISH

IN COMPUTER-AIDED design (CAD), an engineer sitting at a screen and keyboard unit uses an input device like a light pen or a graphics tablet to pin-point positions on the screen. He then joins them to make lines and so build 2D drawings and 3D representations of objects such as engineering components or electronic circuit boards.

The hardware looks impressive—colour screens, tablets, complex keyboards, big drawing plotters, powerful processors—but the key to its successful use lies in the software.

The software determines how easily and quickly the user can make the system "draw" the shapes he wants and how easily and efficiently he can interact with what is on the screen.

Each year, the cost of "chip" hardware (logic and memory circuits) has decreased in real terms while the cleverness (and cost) of the software has increased. A recent report* from market researchers Frost and Sullivan predicted that the software element of CAD suppliers' revenues, 27 per cent at the moment, will reach 36 per cent by 1987.

Designers are only gradually accepting the more advanced and expensive software, however. The F and S report says that users are adopting surface and solid modelling, for example, for only 2 to 5 per cent of all CAD work.

The figure is small despite promotion by the makers and perhaps reflects the hard-headed approach of most engineers.

Nevertheless, the use of CAD in general has expanded rapidly since it made its first real impact in the late 1970s—in spite of economic conditions. In 1979 European CAD revenues were about $100m, for 1983 they are put by F and S at $570m and in 1987 are likely to reach $2,300m.

This signifies an annual growth rate of 40 to 50 per cent, whereas the computer and information systems market in general is only set to expand at about 20 per cent a year.

Computer aided design, manufacturing and engineering (CAD/CAM/CAE) is now dominated by U.S.-based companies. Computervision and IBM are battling for first place on a world basis but in Europe CV's revenues are put at $148m and IBM's at $103m. By 1987 they are expected to be equal at $460m each. Frost and Sullivan says CV is losing market share in Europe.

Next in order of turnover in Europe are Intergraph ($40m in 1983), Applicon ($36m), Calma ($31m) and Racal Redac ($27m). Only the last of these is British-based, although Cambridge Interactive Systems (now part of CV), turned over $20m.

Turnkey projects

Companies with revenues below $20m are headed by McAuto and MCS/Impell (both American) while the main French contender is Matra Datavision. Pafec, Ferranti Infographics and Applied research of Cambridge are other significant UK suppliers. Kongsberg operates from Norway, Siemens from Germany.

These are all "turnkey" suppliers—that is, they provide fully supported hardware and software solutions to customers' problems. Often this is the only viable solution for users with no computing background. But many of the 60 companies trading in Europe will offer software to run on existing computers, often IBM, DEC, Prime, Hewlett Packard, Apollo or Data General machines.

This might be preferable when existing computers have plenty of spare capacity, where integration with other systems running on the machine is desirable, or where CAD is already in place and software enhancements are envisaged.

But companies must then be competent to choose software and perhaps more hardware, and put it all together.

What kinds of CAD system are available? According to Frost and Sullivan, the largest category of user is mechanical/electrical engineering ($430m of purchases in 1983), followed by electronic printed board design ($150m), integrated circuits ($80m), process plant ($70m), architecture and civil engineering ($55m) and mapping ($40m).

There are two dozen or so mechanical system offerings, including IBM's top-selling Cadam, Computervision's CDS4000, IGDS from Intergraph, Bravo from Applicon, DDM from Calma and Unigraphics from McAuto.

Various levels of sophistication are offered, starting with the production of drawings in plan, front and side elevation, using standard forms that the user can call up from the computer's memory and position on the screen.

The more advanced software allows "wire frame" construction of an object in 3D, by describing all of its vertices and edges using light pen or graphics tablet (The former is used to "draw" on the face of the display tube, the latter mirrors on the screen whatever is drawn on the tablet area with a special stylus).

Other programs go a step further and show the surfaces, flat or curved; bounded by the wire frame, while the ultimate in sophistication is the "solid model" (Computervision's Solidesign, for example), where in effect, a colour picture of the object is seen on the screen — "lit" from any angle the user desires.

Once these completely descriptive geometrical databases have been stored, there is software — IBM's Catia for example — that will animate completed constructions like engine parts or robots. But such systems consume much processing power and tend to be expensive.

CAM (computer-aided manufacturing) is a development that uses the database to give cutting instructions to machine tools, while CAE (computer-aided engineering) allows the engineer to apply, for example, static or dynamic forces to a structure on the screen to see how it behaves — long before any metal is cut.

For the electronics industry, there are about 50 programs for the design of printed circuit boards — an area in which Britain's Racal Redac and Marconi Quest are well known, although most of the CAD majors offer systems. They allow the designer to create a schematic circuit diagram, simulate its logic activity, lay out the board and route the interconnections. The computer provides data to photoplotters to yield accurate artwork for production.

Test patterns

Some of the programs will also generate the necessary test patterns for the auto-testers and design the test fixtures.

Similar requirements occur in the design of integrated circuit "chips" — the third largest market in Europe after mechanical and PCB design. Relatively new companies such as Daisy Systems, Mentor Graphics and Valid have made a considerable impact at a time when electronic systems companies are increasingly designing their own chips.

Process plant designers in the oil and chemical industries can use CAD for large arrangements of pipes, vessels, pumps, valves and similar items which have to be optimally placed in space with no clashes. Programs include PDMS (Prime Computer) Medusa (Computervision), Pegs, (Cadcentre), IGDS (Intergraph) and Prodabas (Prosys Technology).

Building design also benefits from CAD. There are about 15 programs which allow the whole project to be assessed before a single brick is laid, from internal and external appearance to the insertion of services such as heating and ventilating.

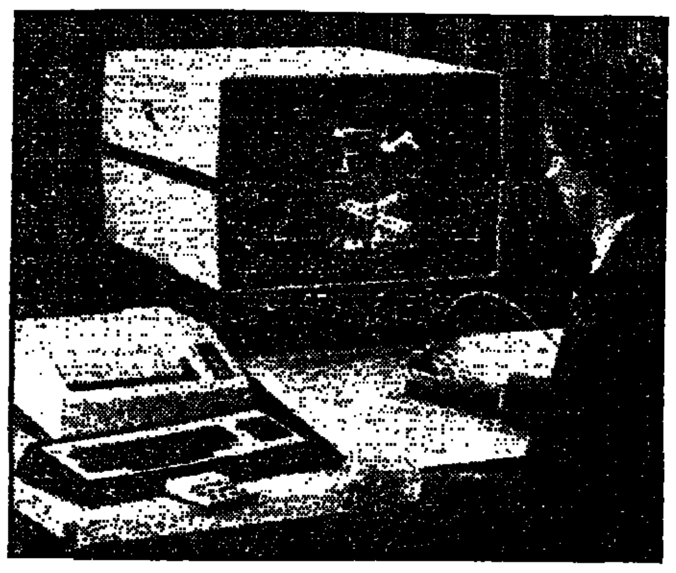
*Computer Aided Design Systems in Europe; Frost and Sullivan; 329 pp; $1,775. Phone: 01-486 8377.

Revenues from European sales

Computer-aided design (CAD): figures in $m

Application	1983	1984	1985	1986	1987
Electronics, PCB design	110	150	218	290	370
Electronics, IC design	52	80	127	184	260
Mechanical and electrical	295	430	635	880	1,290
Architecture and civil engineering	38	55	77	106	140
Process plant design	48	70	104	142	190
Mapping and utilities	27	40	64	98	140
Totals	570	825	1,225	1,700	2,300

Source: Frost and Sullivan forecasts.



A piping engineer in the oil industry uses a Computervision Europe Construction engineering package to route piping and place equipment. Alignment and connections can, for example, be quickly checked to ensure interference does not occur in the system.

Indication of a maturing market

Software publishing

PHILIP MANCHESTER

THE LAST couple of years has seen the birth of a new industry. Prior to the introduction of computer software products to the shelves of High Street chains, such as Boots and W. H. Smith, this specialised industry could not have existed. It is called software publishing and, to a certain extent, its birth is an indication of the growing maturity of the mass computer market.

Mr David Ward, chairman of Manchester-based software firm, Ocean Software, describes the software business prior to the entry of High Street stores: "About 18 months ago, most software was distributed by direct mail order. Companies and sometimes the programmers themselves would advertise in the specialist press and hope for a large wad of orders to fall through the letter box. The products were then despatched in Jiffy bags to the waiting computer owners."

But the entry of large-scale distributors—first of all with hardware and then later with the software products—has changed all that.

Mr Ward estimates that UK chain stores now sell 75 per cent of the software for the home computer market.

"Perhaps the major factor in the development of that market has been Sinclair's Spectrum computer. For the first time it made it possible to distribute computer programs on cassette at 'pocket money prices,'" observed Mr Ward. A typical computer game costs around £5.00.

He sees the idea of software publishing coming about as a result of the mass market demand for software.

The needs of a mass market demand greater professionalism in packaging, marketing and distributing the product.

"When you are dealing with organisations such as Boots and W. H. Smiths they expect the product to be there when you say it will," noted Mr Ward.

Resources

Ocean Software may spend between £10,000 and £20,000 to bring a new product to market with all of the advertising and packaging, point-of-sale material and special support.

Mr Ward suggests that this sort of operation is beyond the resources of the average small-scale software builder for microcomputers.

He goes on to say that being a computer programmer can actually be a disadvantage. Mr Ward and his colleagues at Ocean all have non-computer backgrounds, though the company does retain a number of in-house technical people "to keep our finger on the pulse."

Occasionally they will generate a product but, in the main, the products are bought-in or commissioned in much the same way that a manuscript is obtained by a book publisher.

"The industry has become very 'fashion-driven' and the charts for software are becoming as important as the pop record charts," commented Mr Ward.

A typical product packaging exercise entails taking a rough idea by an author and "smartening" it up. This would include introducing high quality graphics and good documentation.

"We also rewrite product from one computer to another. A game that has been successful in, say, the Spectrum charts is almost guaranteed success in the Commodore charts. We do a lot of translating games from one machine to another," he added.

Melbourne House, another software publisher, has a background in book publishing and almost fell into the software market by chance.

"We published a book on the Sinclair ZX 80 computer and it was an enormous success. Our managing director decided to drop everything and move into software publishing," said Christine Laughame of Melbourne House.

"We have quite a large team of in-house programmers which makes us different from a book publisher—they don't employ authors," she went on.

Melbourne House tends toward producing its own products but it does take outside authors' software.

"The problem is that an author can go to several companies and auction a product off to the highest bidder," she added.

Team operation

"I think we will be tending to generate our own products more and more as the trend is toward working in teams. The most successful Melbourne House game has been The Hobbit and that took a team of people 18 months to write."

The computer games subsidiary of the Virgin empire, Virgin Games, falls between Ocean and Melbourne House with about half of its products "coming in through the door" and the other half written by employees.

"We are keen to let programmers know that we would be interested in marketing their work," Mr Nick Alexander, head of Virgin Games.

"But we need the internal staff to dress the products up for the market."

Mr Alexander described a typical example of using an external author: "We had a relationship with the author of one of our most successful products, Falcon Patrol — Steve Lee. "He came to us with another program about which we were only moderately interested, but he had mapped out the ideas for Falcon Patrol to us. We did a deal with him on the program he had finished, mainly so that the could put Falcon Patrol together for us."

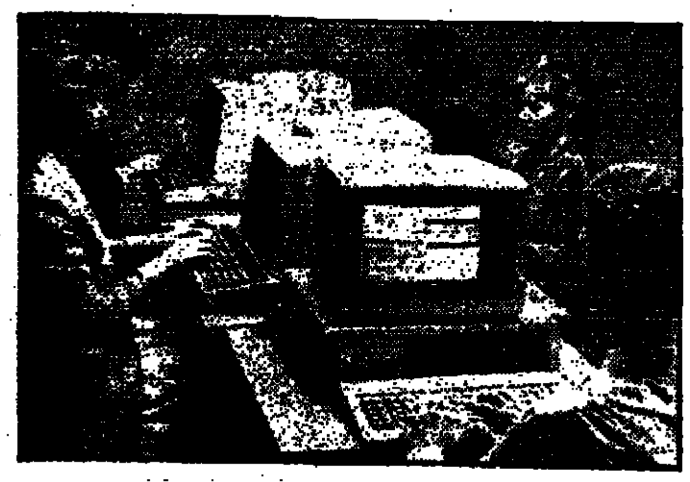
Mr Alexander describes the relationship between Lee and Virgin as similar to that of record company and an artiste.

"What does not exist at the moment in the market is the equivalent of a literary agent who would work with an author to package a product up. This means the software publishers are fulfilling that role."

Other software industry people have compared software product publishing to film production, although none of the obvious metaphors really apply, especially with the new developments currently taking place in networking. As yet, the distribution of software over telephone lines is in its early stages.

But with the considerable freedom such a distribution method offers, it is only a matter of time before this becomes, perhaps, the dominant form.

Such a development will probably be as traumatic for the software publishing industry as the transition from mail order to retail distribution.



Starlink from Digital Research creates five workstations (above) from one IBM Personal Computer so that several people can share files, software and data simultaneously and cost-effectively.

A boost for the tourist industry

Leisure sectors

RAYMOND SNODDY

THE COMPUTERISATION of the English holiday resort is scheduled to take a dramatic step forward today.

Five English resorts—Bournemouth, Brighton, Hastings, Scarborough and Torbay—have got together for a computer booking pilot scheme. For the first time it may become as easy to book a holiday in Bournemouth as it has been for years to book in Benidorm.

Travel agents throughout the country will be able to make instant confirmed bookings for seven and two night holidays in each resort through a computerised viewdata system.

What it is hoped will give the English seaside resort a more competitive edge is made possible by a computer reservation system called Rita (Reservation Information Tourist Accommodation) which has been developed by Datasolve, the Thorn EMI information technology subsidiary. The development has been supported by the Department of Trade and Industry, the English Tourist Board and the British Resorts Association.

In the project each of the 119 hotels taking part allocates a portion of its rooms to the Rita system so that confirmations can be instantaneous. Rita keeps track of all bookings made and automatically maintains an up-to-date picture of availability of rooms.

The agent can also specify to Rita what type of accommodation is required together with the price range and dates.

Rita will search for particular specifications for those wanting to know which hotels take dogs or have four-poster beds.

Although Rita is making its debut at only five reesorts in the depths of winter it is an important step forward. The hope of both the DTI and UK travel industry is that the system will gradually build up into a national data base of both information on both holiday resorts and available accommodation.

The English Tourist Board (ETB) hopes that Rita, which is based on a Prestel/Gateway computer system will give travel agents a better opportunity to tap a market for holidays and short breaks at independent hotels which the Board believes is worth £2.8bn a year.

Big step

Mr Michael Montague, until recently chairman of the ETB said earlier in the autumn when announcing the new system: "In introducing Rita I believe that English tourism is taking a huge step forward. At last there will be a fast, cheap and easy way to choose and book a full range of seaside holidays at these five resorts."

The importance of the Rita system and the welcome being given to it in the travel industry merely underlines the extent to which whole sections of the leisure industry are dependent on sophisticated software.

To a very considerable extent the modern efficient world of mass package holiday travel would not have been possible without computers to keep track of bookings and vacancies.

In travel agents the viewdata screen is becoming almost as ubiquitous as the telephone and hotels are heading in the same direction.

- In aviation there are systems such as the British Airways Travicom which gives access for air travel bookings to airlines all over the world.
- The Association of British Travel Agents was instrumental in developing computer systems which offered instant access to tour companies and reservations via viewdata.
- In hotels, computerised booking and management systems are gradually taking over from their manual predecessors and new technology, which started out in the largest luxury hotels is now, thanks to the microcomputer, penetrating hotels with fewer than 50 beds.

British systems such as Champs—now owned by Software Sciences—is in use in more than 35 hotels in many parts of the world. Earlier this year the Champs systems was installed in two hotels in China—in the 560-bed Great Wall Hotel in Canton and the 2,150-room Lido Hotel at Peking Airport.

As in other fields of software there is considerable evidence that British software in the travel industry is well up in the international league and there should be good prospects for increased exports in future.

Computer systems were introduced into hotels as early as the mid 1960s. There was one at the Strand Palace Hotel in 1967. The number of functions covered has increased as the cost of the hardware has fallen.

Software Sciences says its Champs system handles most of an hotel's activities including resturant point of sale, direct guest billing, reservation, marketing statistics guest histories and general accounting.

Hotel system

Software Science has recently introduced a hotel management system for the smaller hotel on a desk top Data General computer which costs something in the region of £35,000-£40,000. Its functions include the automatic carrying out of credit ratings as the guest checks in.

Mr David Levy, marketing development director of Champs believes that within two years between 60-70 per cent of hotels in the UK with more than 50 beds will be computerised and 20-125 per cent of those with less than 50 beds. Turnover has risen dramatically to more than £1.5m this year and the company is actively pursuing plans to try to break into the U.S. market where there are believed to be more than 70 different hotel computer systems in operation.

Although the company has not won any contracts in the U.S. yet Mr Levy says: "We have never found ourselves out of our depth. We certainly plan to move into the American market."

The growth in the holiday software market has also meant an opportunity for companies running computer bureaux. Baric, the ICL subsidiary has offered an on-line reservation service using viewdata for the past two years.

Baric says 10 tour operators including Global uses the system. The most recent recruit to the Holidaymaster system is a motoring holiday subsidiary of the Automobile Association.

The main advantage of using computer service companies such as Baric is the lower investment compared with setting up a stand-alone operation. Apart from initial setting up charges Baric charges its tour operators about £2 for each holiday actually booked.

Thomson Holidays decided to go their own way using the possibilities that Prestel had opened up. The company started using computers for administrative purposes in the late 1960s and introduced its first realtime reservations system in 1976—TRACS (Thomson's Reservation and Administrative Control System).

In 1982 Thomson's introduced its new national system, TOP-Thomson Open-Line Programme.

According to Mr Colin Palmer, a Thomson's director, TOP has transformed the company's relationship with its travel agents. Now when the agent makes a booking through TOP the transaction is binding as soon as it is confirmed on the videotex screen

Around 5,000 travel agents are linked to the system and Thomson gets 70 per cent of its business that way.

Instant tickets for package holidays are, however, probably still a couple of years away, Mr Palmer believes.

Rapid changes in technology and financial software requirements bring strong pressures on system suppliers

Suppliers cannot rest on their laurels

Banking and finance

ALAN CANE

THE NEWS late last month that FTS, a member of the Link consortium of financial institutions had given Logica and Olivetti the contract for its automated teller machine sharing network illustrates many of the key features of the financial software business today.

First, the consortium itself. FTS is a company within the Link consortium which includes building societies, financial institutions and savings banks—a good cross section of the "non-banks" which are expected to make a technological splash in the banking world.

Second, Olivetti, the hardware supplier. It will be providing the central switches for the system based on its CPS/32 fault tolerant computers.

The CPS/32 machines are, in fact, built by Stratus, a comparatively new U.S. company which creates fault tolerance in the computer hardware by pairing off sets of very powerful microprocessor chips and comparing the results from each set of pairs.

The FTS order is important both to Olivetti and to Stratus as they try to break into the fault tolerant banking market, dominated by Tandem, the original non-stop computer maker.

Then there is Logica. A leading, publicly listed UK computer services company, it has carried out a number of major banking projects including CHAPS, the clearing banks automated payments system.

The software it is offering Link-On/2 is not its own, however, but written by a Dallas based software house Shared Financial Systems (SFS). Logica has been offering On/2 for only a few weeks in the UK; the market leader in shared ATM software is Applied Communications Incorporated (ACI) with a switching package called Base 24.

Lastly, the actual automated teller machine (ATM) that FTS is recommending to its members is the Diebold 912, marketed in the UK by Philips. Diebold is the market leader for ATMs in the U.S., but has a comparatively small share of the U.S. market, dominated by NCR.

The lessons that can be drawn from the FTS order are these:

- First, no supplier can afford to rest on its laurels when the technology is changing so rapidly. Tandem and ACI were undisputed leaders in their particular fields and still are; but Stratus and SFS are going to prove strong challengers with what appears to be newer technology.
- Second, customers are beginning to appreciate the importance of an integrated package of hardware and software. The CPS/32 and On/2 proved to be a combination that the consortium could not resist.
- Third, the kind of customer who wants financial sofware today is likely to be quite different from the customer of 10 years ago. What is more, computing companies which have long experience in some aspects of financial software may have to buy in new experience from outside to stay in contention.

ATM-sharing is very new to the UK, and only a few years old in the U.S. Logica, despite its expertise in computer communications, did not have its own ATM-sharing package and so sought a suitable system abroad.

The hardware side of the electronic money business has settled down. For large systems the banks and others will use IBM, Tandem and, increasingly, Stratus. For workstations, they will use IBM Personal Computers (PC) or machines which behave like PCs. The quality of the software will make the difference.

So yet another trend is towards a multiplicity of suppliers. Some years ago, banking systems were built by the banks' own data processing staff helped and guided by the major software houses. CAP and Logica both grew powerfully on this kind of bespoke business, which created the substantial batch - processing systems which still underly the banks general accounting activities.

Tough world

Then there was a pause of some years while the banks—and the non-banks gathered themselves for the move to on-line intractive systems, and to the smaller scale distributed systems which could be run on personal computers.

The big bespoke houses apart, banking packages were in the past written by a handful of software houses which had the experience, luck and judgment to prosper in the tough banking world.

With the move to on-line interactive systems, the flood gates have opened and banking and financial packages are available from a wide range of computer services companies. F International, for example, an unusual software company specialising in freelance programmers has developed a treasury management package.

CAP and Data Logic have both launched integrated dealing room systems while Minnie Business Systems has launched a UK and Foreign Stockbrokers package running under Unix, the high-performance microcomputer operating system, just to give an idea of the spread of companies and products.

The next stage and the greatest challenge to banking software specialists is the integration of banking products and services, to create a coherent whole. Now integration is very much the flavour of the month at present but in a recent report Salomon Brothers noted: "In view of bank deregulation and the steady incursion of nonbanks we believe it is incumbent on bank managements to increase productivity through strategic, futuristic electronic banking plans."

A final trend is the blurring of the distinction between what is financial software and what is not. Treasury workstations, for example, are thought to be incomplete these days without a spreadsheet attached.

The move is towards integrated software like Lotus 1-2-3 and Symphony, but competitors in the financial planning business like David Thorpe of FT Moneywise (which IBM is now selling in some 17 European countries) argue that that kind of integration has proved more cumbersome than valuable. He says what is needed is a dedicated financial modelling tool—"the U.S. broadsheet software houses have come to a dead end."

Decision

But it is certain that decision support will feature more powerfully in financial systems. Mr S. G. P. Dennis of Pactel told a recent financial conference that decision support systems could be applied across the whole finance sector where they could be used for both tactical and strategic decision making.

"There is nothing essentially new in all these," he said. "All these activities have to be carried out in any case. Decision support systems simply allow them to be carried out faster and better."

Really three markets rolled into one

BY ITS intangible nature computer software is not the easiest product to sell. There are no shiny magic boxes with sleek cabinets, merely the promise of functions and performance to try to persuade businessmen to part often with large sums of money.

But computer software has developed into a major industry in the UK—some forecast it will be a £1bn industry by 1987. And creative marketing strategies have been developed which have taken some software companies from the backroom to the international arena in months, rather than years.

The big sell

RAYMOND SNODDY

But the software field is really three markets, rather than one—each aimed at different customers and needing different tactics to conquer the marketplace.

At the top end are software houses selling partially customised software to run the affairs of major industrial groups. Here the bill can easily come to over £100,000 and reliability and trust are the issues, rather than the colour of the packaging.

In the middle of the market companies are trying to sell programs which could easily cost £1,000 for use by small companies or by individual businessmen.

At the bottom end of the market software becomes a low cost consumer product for the home computer—a mass market of tight margins and intense competition in the High Street through such microcomputer multiple stores as Boots and W. H. Smith.

Big orders

The price battles of the High Street are a long way from the world of software companies such as MSA (Management Science America) one of the leading software houses at the "heavy" end of the market.

The company claims it is the world's largest independent software supplier with turnover of $139m in 1983. In recent weeks orders in the UK have included £100,000 software packages for both BP Oil and Sharp Electronics (UK) and an £80,000 deal with British Aerospace Dynamics Group.

To Mr Michael Hunt, MSA's executive vice president for international activities, marketing such software is a very precise task.

Although the company does some specialist advertising, its marketing — because of the nature of a product—tends to be a personal affair.

Large potential customers have heard of MSA and put the company on a short list of potential candidates and the task involves trying to convince key decision-makers through presentations.

That was how MSA won its largest contract in local Government, so far—the £110,000 deal to introduce their accounts payable, budget control and general ledger software to the Greater London Council. (The system had its teething problems but, both sides now agree, is working well, just as the Government sets about abolishing the GLC).

There were three names on the shortlist for the GLC contract. The others were McCormack and Dodge and Package Programs. One GLC observer thought that MSA's was the slickest presentation and that might have made a difference in the final decision.

The company usually said "yes" when asked by GLC financial specialists whether their software could carry out a particular function. The other two seemed to be more cautious.

A sale of such a software package can take between two and six months and involve as many as four systems consultants and support people before the contract is actually signed. The entire process from first contract through implementation and training, to the removal of the last bug in the system, can be as long as 18 months.

At this end of the software spectrum marketing is very closely integrated with other aspects of the company.

"The key thing that users tell us is that they want to do business with a stable, growing company and they are very concerned about how much money is being spent on R&D," Mr Hunt said.

Purchasers need to know the system can be updated. MSA know from hard experience that the ability to sell major software systems to IBM mainframe users (their main market) does not automatically confer the skill of selling individual business software.

MSA has tacitly admitted that it is not the right company to run successfully Peachtree Software, its subsidiary in the microcomputer market.

MSA alone, Mr Hunt says, is a profitable company but Peachtree's performance is dragging it into loss. MSA is now looking for purchasers for Peachtree and says there are several interested parties.

A fundamental difference between the top and the middle of the market is the relative amounts spent on R&D and marketing.

"MSA spends 20 per cent of its turnover on R&D and 3-4 per cent on marketing. With a campany like Lotus (which produces software for businessmen), its 20 per cent marketing and 4 per cent R&D" is how Michael Hunt encapsulates the difference.

Prices

Lotus says, in fact, that it spends more than 10 per cent on R and D but accepts the different emphasis because of the nature of its software.

Lotus has grown to a turnover of $100m since its founding in April, 1982, by producing advanced integrated software packages for personal computers. But at prices of £395 for the 1-2-3 package and £550 for the second Lotus product, Symphony, individual presentations, says Mr Irfan Salim, European marketing manager, are out of the question.

Instead, Lotus (which sells its software through the specialised computer dealers) organises one-day training presentations in various parts of the country for between 20-30 users at the time.

Software companies such as Lotus are making considerable efforts to encourage and support their local dealer network.

Lotus, for instance, has sent a kit containing copies of its current advertising to its 450 dealers. Dealers can then place local advertising, partly financed out of the sales of the company's software.

Companies such as Applied Computer Techniques (ACT) has set up its "Pulsar partnership" offering national advertising, technical support, next day delivery to its dealers. In recognition that the microcomputer software market "is almost as fickle as the fashion business," the group is also taking back unopened dead stock for a small handling fee.

Earlier this year, W. H. Smith also took a large step into software distribution. It linked up with the largest business software distributor in the U.S., Softeam.

WHS Softeam plan to try to take 25 per cent of the UK market for business software in the next three years.

At the bottom end of the market, particularly with games and other low-cost software, there appears to be the beginning of a move away from using distributors. The Virgin Group and several other companies are planning to take over responsibility for their own distribution.

Cut-price software houses, such as Mastertronic, are avoiding distributors and selling direct to a wide range of retail outlets.

● **Graphic demonstration: 15 UK electricity boards have been introduced to a new concept of energy distribution control, using computer graphics.**

Above: Mr Ian Bilsland (standing), introduced the concept to former Energy Minister, Lord Avon at a London demonstration. Mr Bilsland is managing director of a small Scottish company, Graphic Information Systems, of Blairgowrie, Perthshire, which has produced what is described as a solution to a network control problem that has so far eluded the world's energy distribution engineers. It uses computer graphics technology to display "active diagrams" of distribution networks that are interfaced directly to telecontrol devices in the field.

Mr Bilsland explains that the graphics terminal provides, in effect, "a window on a distribution network map that, in the case of even a small electricity board, could extend across 2½ acres if it were laid out, end-to-end."

Graphic Information Systems estimates the particular market for computer graphics systems in electricity distribution networks at £25m in the UK; £100m in Europe and, perhaps, £300m worldwide.

The system is claimed to be equally applicable to any energy network — gas, water, oil and so on.

No single 'package' will fit all bills

LOCAL AUTHORITIES, like banks and accounting firms, are sophisticated computer users and have been for years.

The very nature of their statutory responsibilities, dealing as they do with people, money and places, makes them a natural candidate for automation. That very diversity of activities means that an equally rich variety of computer software must be available to meet their needs.

And in this respect, Britain's local authorities are a paradigm of the typical modern computer user. The range of activities they are involved in is broadly similar across the country.

They all have to pay their staffs, account for the £23bn or so local authorities in England spend each year on goods and services, control their housing stocks. Yet each council has its own refinements of operation which make it difficult for a "standard" computer package to fit all bills.

And there is the additional burden of changes in legislation which must be complied with by set dates, throwing a substantial extra burden on the data-processing staff.

This problem is rarely appreciated or treated sympathetically by those outside the data centre, but it has become the data-processing manager's chief concern these days.

Well over 50 per cent of staff time in most data centres is spent on maintaining and modifying existing programs which explains why requests for new applications may not be met for several months.

This, together with the decline in real terms in the cost of computing hardware, is the reason for one of the principal trends in local authority computing today, the distribution of computing power rather than its concentration at the centre.

In the past, local councils were usually dependent on their county council data centre for processing power — now they can afford to install their own small machine.

This trend is also noticeable within the larger councils—in the past all departments would depend on the data-processing department for their computing; now individual departments, housing, say, or rates are installing their own machines, often ICL Me29s, to run their own applications.

According to a regular survey of the computer industry carried out by the consultancy Urwick and *Computing* newspaper, "the public administration sector, mostly covered by ICL, is the user sector with the biggest boost planned for decentralisation, while public utilities are the most cautious."

Manufacturers such as ICL say that the quality of software they can offer is now critical in competitive tendering: hardware is almost taken for granted.

The local authority sector in the UK is unusual in the way it depends on its hardware manufacturer for software. ICL is the dominant force in local authority computing with some 58 per cent of the hardware market with IBM in second place with 23 per cent.

Local authorities

ALAN CANE

Honeywell and Sperry have very much smaller shares while in the smaller local authorities, the minicomputer manufacturer Microdata has built up a substantial customer base.

Like almost every other kind of business these days—and the big banks and the Stock Exchange are good examples—the local authorities would like to see full integration for their "ideal" system.

In other words, all the information belonging to the authority would be held on a single central database which would be available to users in all the authority's departments where it could be manipulated by specific applications programs.

There have been attempts to build such systems, but none has been really successful. Perhaps the best-known attempt was ICL's Local Authority Management Information System (LAMIS), parts of which are still used by some of ICL's local authority customers.

The problem was, an ICL spokesman explained, that the work involved in loading the database proved insupportable.

Now its approach is to build discrete programs for particular applications—finance, housing, rates and so on—hoping to create links between them at a later date. So far, no local authority has progressed very far with this "data sharing" approach.

ICL's star performer, in London at any rate, is Islington which runs a number of ICL local authority packages including LAFIS (Ledger Accounting Financial Information System) and HMIS (Housing Management Information System) on its twin 2988s.

Manufacturers' systems and those from independent software houses have not always proved acceptable to local authorities and Camden decided to design and write its own housing benefits system from scratch. Now it has been installed in eight other local authorities.

Perhaps the most important development in recent years, however, has been the appearance of local authority software country-wide consortia (some years ago some of the London boroughs set up a similar scheme but only one system came out of it).

The Chartered Institute of Public Finance and Accountancy has played a key part here. Mr Rod Aldridge, managing director of its computing services subsidiary, explains that the institute linked together some 154 authorities to sponsor jointly the development of software to handle computerisation of the authorities' direct labour force activities.

This was forced on the authorities by the new local government legislation in 1980; there is certainly a belief that new legislation now going through was drafted with the computer in mind.

The complex calculation and formulae built in can only be handled efficiently by computers.

Mr Aldridge's direct labour package was written by CMC and ICL and both packages are being used by more than 100 authorities, the CMC version with CIPFA's "seal of approval."